

THE INFLUENCE OF VALUES AND PSYCHOSOCIAL JOB CHARACTERISTICS
ON INTENT TO LEAVE AMONG HOSPITAL NURSES

by

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Abstract

THE INFLUENCE OF VALUES AND PSYCHOSOCIAL JOB CHARACTERISTICS ON INTENT TO LEAVE AMONG HOSPITAL NURSES

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The supply of registered nurses is predicted to be insufficient to meet the healthcare needs of an aging society. It is imperative that nurses are retained to alleviate effects of this shortage on quality nursing care. Intent to leave is a behavior driven by many factors in registered nurses working in a hospital setting. The purpose of this study was to determine the relationships among personal values, individual and psychosocial job characteristics and intent to leave in hospital nurses. Individual characteristics included demographic variables such as age, gender, years of experience and education.

Psychosocial job characteristics were decision latitude, psychological demands and social support. A nonexperimental, exploratory, cross-sectional survey research design was used. Data were collected using an online survey tool in a sample of registered nurses in the Mid-Atlantic Region. Participants ranged in age from 22 to 74 years old ($M = 46.9$). The majority of participants were female ($n = 108, 93.1\%$), non-Hispanic Caucasian (n

=94, 81%) and had obtained a bachelor of science degree (n=59, 50.9%). Participants had on average spent 11.9 years in their current job, had 20.9 years of experience, and worked 31.5 hours per week. The sample was dichotomized for bivariate comparisons: nurses with intent to leave (n=41) and nurses without intent to leave (n=75). Those with intent to leave had significantly lower income and a significantly lower score on the personal value of benevolence, indicating this was a lower value priority. Pearson correlations were computed and stepwise multiple regression was performed to determine the relationships among predictors of intent to leave. Fewer years of experience as a nurse, fewer years in the current job, and a higher score on the personal value of hedonism significantly predicted intent to leave, explaining 9.2% of the variance.

Despite the progress in understanding factors related to intent to leave, there is still insufficient evidence in literature on effective retention strategies. This study provides answers of the effect of values, individual and psychosocial job characteristics on intent to leave. Moving forward, implications for nursing leaders are to identify retention strategies based upon the relationship of demographic data, value prioritization, and perceptions the psychosocial job characteristics. Screening potential new hires can be performed using behavioral interviewing techniques and surveys about values and ideal work settings. Future research should include interventions mitigating the effect of intent to leave.

Chapter One

Introduction

According to the United States Bureau of Labor Statistics (2012), nearly 30% of all registered nurses (RNs) are employed by hospitals providing generalized medical and surgical care. The hospital setting has been shown to be a physically and mentally demanding work environment (Theorell & Karasek, 1996). This type of environment is the first setting in which many new graduates are oriented. The novice nurse hired to work on an inpatient hospital unit has expectations regarding the position and the nursing profession. Contradictions to these expectations are met with adaptation or resignation. The commitment of the nurse to the employer begins to deteriorate in those who contemplate resignation (Cenmano & Gardner, 2008). Resigning could be an indication that personal happiness is valued more than security (Rassin, 2008). The nurse that adapts may have differing values from the nurse that leaves. Those who stay may value security over hedonism. A flexible schedule to accommodate child or elder care may be of greater value. Psychological demands of the job, decision authority and lack of social support could also influence behavior (Tei-Tominaga & Miki, 2010).

This chapter will present concept analyses of values, job characteristics and intent to leave. It will also provide the purpose and theoretical framework of the research on values, psychosocial job characteristics and intent to leave nursing. Scant literature exists

related to job characteristics and values as predictors of a nurse's intent to leave in the context of the nursing profession (Takase, Maude & Manias, 2005; Mills & Blaesing, 2000). There has been significant research focusing on the negative effects of job stress on nurses but limited information is found that combines basic values relating to values theory with psychosocial job characteristics (Seago & Faucett, 1997; Shader, Broome, Broome, West, & Nash, 2001). In this study, registered nurses working as staff in a hospital setting were assessed in terms of their intent to leave their job or the profession. The conceptual model depicting the influence of values, psychosocial job characteristics and demographic variables on intent to leave position and profession is presented (see Figure 1.1). Instruments measuring these constructs will be discussed in Chapter 3.

Problem Statement

By 2020, registered nurse jobs are anticipated to grow by 26% (711,900), with 495,000 of those openings due to replacement of nurses currently working (U.S. Bureau of Labor Statistics, 2012). Nurses are leaving the workforce in increasing numbers (Strachota, Normandin, O'Brien, Clary & Krukow 2003). While there are many reasons why nurses may leave their jobs, researchers have attempted to determine how work stressors, social support, and other variables impact intent to leave (Hall, 2007; Tei-Tominaga & Miki, 2010). Value importance has been explored in other professions, such as in the human resources industry, yet there has been a shortage of research in the nursing profession.

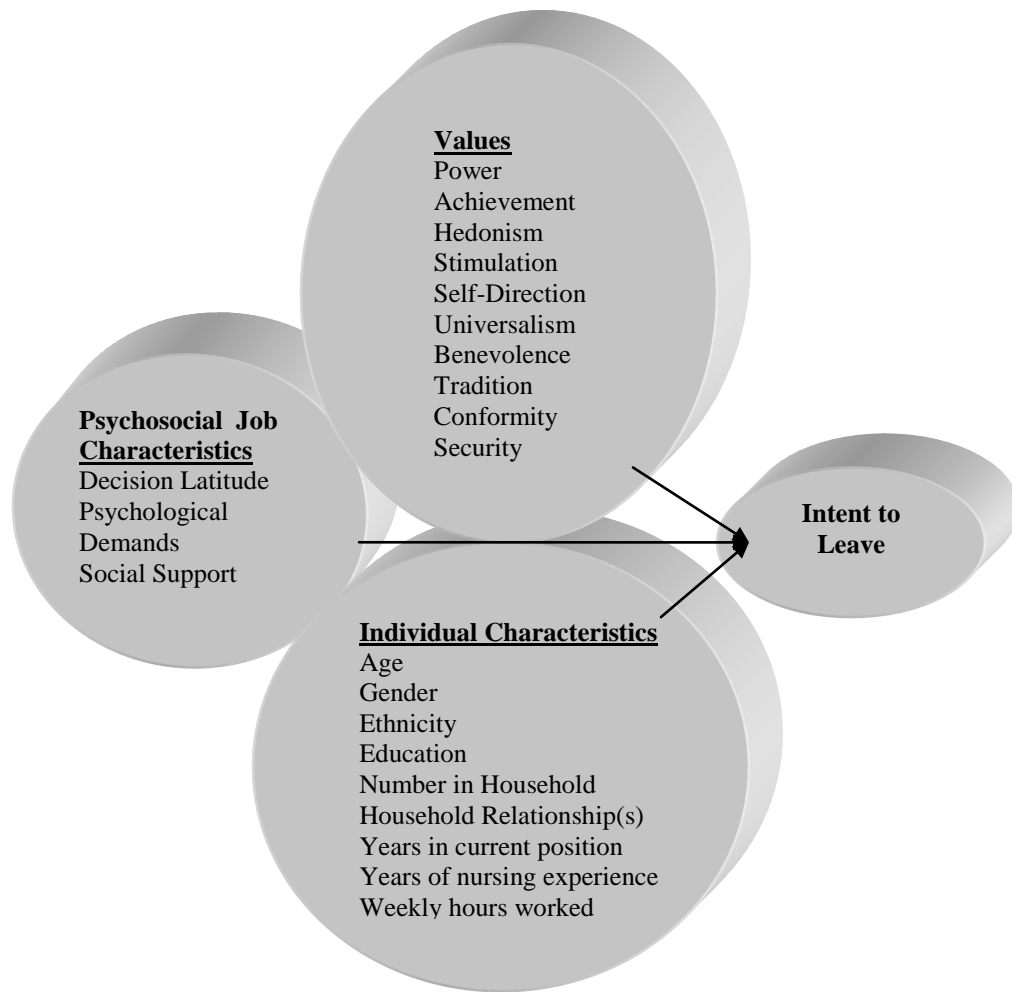


Figure 1.1: Values, Psychosocial Job Characteristics and Individual Characteristics

Shared values indicate shared goals or motivations; those with cultural or religious commonalities have similar driving factors (Schwartz, 1999). Psychosocial job characteristics, such as decision latitude and psychological demands, have been shown to adversely impact health if unbalanced (Cheng, Kawachi, Coakley, Schwartz & Colditz, 2000; Lavoie-Tremblay, Bonin, Lesage, Bonneville-Roussy, Lavigne, & Laroche, 2010). Intent to leave has been researched extensively but there is limited research on how each

of the variables chosen for this study influence intent to leave and the interaction of selected demographic variables. This knowledge will improve our ability to determine the origin of turnover and perhaps lead to interventions that could decrease the incidence of this phenomenon.

Background

Values have been discussed as having a genetic basis (Schermer, Feather, Zhu, & Martin, 2008). Values have been linked to individual characteristics and behavior (Bilsky & Schwartz, 1994; Schwartz, 2005). Schwartz, Melech, Lehmann, Burgess, Harris and Owens (2001) found that as people age, tradition, conformity and security are given higher value priority, whereas self-direction, stimulation and hedonism are valued less. Various factors have been shown to have an impact on value priorities. These factors include age, education level and gender (Schwartz, 1996). Other factors may preclude the pursuit of hedonistic, stimulating goals, such as family responsibilities (Schwartz, 1996). Intent to leave has been defined as the perception a nurse has about whether he/she will leave a position in the undefined future (Hinshaw, Smeltzer & Atwood, 1987; Larrabee, Janney, Ostrow, Withrow, Hobbs & Burant, 2003). Larrabee et al. (2003) described nurse turnover as the proportion of nurses who leave a position in any given year compared to the number of fulltime nurse positions in a unit or organization. Intent to leave has been interpreted as a predictor of or precursor to nursing turnover (Larrabee et al., 2003; Stone, Mooney-Kane, Larson, Pastor, Zwanziger & Dick, 2007). It is referred to as the final stage before actual resignation, although previous literature has not given this stage a time limitation (McCarthy, Tyrrell & Lehane, 2007). Job satisfaction has

consistently been found as a predictor of nurse turnover (Sellgren, Ekvall & Tomson, 2008). It has been noted previously that age, education, marital status and full time employment contribute to the variance of intent to leave (Eberhardt, Pooyan, & Moser, 1995). Other literature has shown that supervision and work environment, in addition to low job satisfaction, are factors that may lead to a nurse's intent to leave a current job (Strachota et al., 2003).

Purpose

The purpose of this quantitative study is to examine the relationships among personal values, individual and psychosocial job characteristics and intent to leave position and profession in hospital nurses. Personal values include power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. Individual characteristics include demographic variables such as age, gender, years of experience and education level. Psychosocial job characteristics are decision latitude, psychological demands and social support.

Conceptual Framework

In the nursing profession, values are the foundation for practice. Respect for the dignity and privacy of others, striving to maintain a safe environment for patients and taking ownership of actions are all ways in which nursing practice is defined (Yarbrough, Alfred & Martin, 2008). Professional values are outlined in the American Nurses Association (ANA) Code of Ethics for Nurses (2001). In the Code of Ethics for Nurses, it states that a professional association is responsible for expressing the values of the profession to its members (American Nurses Association, 2001). Many professional

organizations, such as ANA and the American Association of Critical Care Nurses (AACN), define their core values and standards for behavior (ANA, 2001; Vezeau, 2006).

Schwartz's values theory was the conceptual framework for the study. It has been tested in 60 countries using thousands of participants. The values theory describes values as principles, motivated by goals, which guide people through life (Schwartz, 1999, p. 25). It is built on the premise that one single value does not drive attitude or behavior, but a trade off occurs when one value is dominant over another value (Schwartz, 1996). In the theory, values are a representation of goals facilitating human existence. These values are organic, fundamental to communication with others and endurance of the group (Schwartz, 2006). The values theory not only defines the different values and the goals driving each value, but the relationship between values. This relationship may be antagonistic or synergistic (Schwartz, 2005). Table 1.1 conceptually defines each value measured by the Portrait Values Questionnaire (PVQ).

The crux of Schwartz's values theory is that "actions taken in the pursuit of each type of values have psychological, practical and social consequences that may conflict or may be compatible with the pursuit of other value types" (Ros, Schwartz & Surkiss, 1999, p. 51). The theory also supports the notion that there are interactions between the different values (Schwartz, 1996). These interactions form a circular pattern, with competing values opposite one another and complementary values adjacent to one another (Schwartz, 1996). The further apart a value is from others in the circle, the more antagonistic its goals.

Table 1.1: Definitions of Terms

Term	Operational Definition	Conceptual Definition
Intent to leave position	Desire to change nursing positions, as measured by the Anticipated Turnover Scale, with a range between 1 and 7 (Hinshaw & Atwood, 1984).	The deliberate choice to leave a job.
Values	Guiding principles in life as measured by the Portrait Values Questionnaire (PVQ). The range for each of the ten values in the PVQ is between 1 and 4 (Schwartz,1992).	Standards that conform to social norms.
Power	Perception of personal success as measured by the PVQ questions 2,17,39 (Schwartz,1992).	Being successful in the eyes of society, with control of material items and esteem
Achievement	Accomplishing goals in society as measured by the PVQ questions 4,13,24,32 (Schwartz,1992).	Doing well in accordance with collective norms
Hedonism	Perceived of doing things for oneself as measured by the PVQ questions 10,26,37 (Schwartz,1992).	Derived from personal enjoyment or happiness
Stimulation	Perceived assortment of variety in daily life as measured by the PVQ questions 6,15,30 (Schwartz,1992).	Variety or innovation in life
Self-Direction	Ability to make one's own decisions in life as measured by the PVQ questions 1,11,22,34 (Schwartz,1992).	Self-sufficient in thoughts and action
Universalism	Recognition and respect for others as measured by the PVQ questions 3,8,19,23,29,40 (Schwartz,1992).	Acceptance and protection of others or of nature
Benevolence	Care and empathy for others as measured by the PVQ questions 12,18,27,33 (Schwartz,1992).	Concern for the wellbeing of others
Tradition	Recognizing customs of others as measured by the PVQ questions 9,20,25,38 (Schwartz, 1992).	Respectful of group norms

Term	Operational Definition	Conceptual Definition
Achievement	Perception of attainment of goals as measured by the PVQ questions 4, 13, 24, 32 (Schwartz, 1992).	Doing well in accordance with collective norms
Security	Perception of safety as measured by the PVQ questions 5, 14, 21, 31, 35 (Schwartz, 1992).	Feeling protected both personally and in groups
Decision Latitude	Autonomy in completing tasks and using skills in the work environment as measured by the Decision Latitude Scale of the Job Content Questionnaire (Karasek et al., 1998). The range of scores is from 24 to 96.	Control over tasks and skill usage.
Psychological Demands	The mental work load of the job as measured by the Psychological Demands Scale of the JCQ (Karasek et al., 1998). The range of scores is from 12 to 48.	The perception of the mental burden of work, including differences in how tasks are completed.
Social Support	Positive relationships with peers and/or supervisors in the work environment as measured by the JCQ (Karasek et al., 1998). The range of scores is from 8 to 32.	Interaction between coworkers and superiors in the work environment.

In the circular continuum of values, four major motivators are comprised of grouped values: Openness to change, self-transcendence, self-enhancement and conservation (Schwartz, 1996). Figure 1.2 describes the values that comprise each motivator. Openness to change is opposite conservation and self-transcendence opposes self-enhancement (Schwartz, 1996). Hedonism is the only value that belongs within the dimensions of openness to change and self-enhancement.

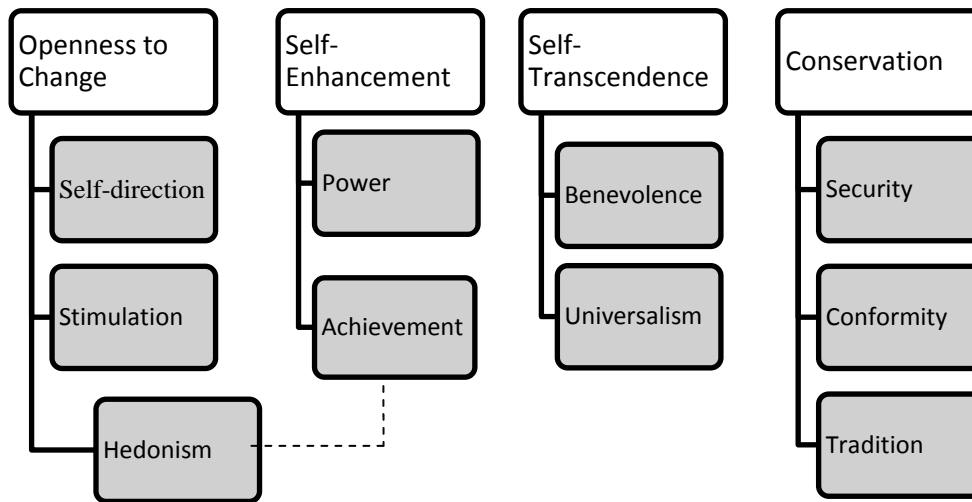


Figure 1.2: Motivators and Their Values

The theoretical framework for the psychosocial job characteristics aspect is the job demand/control model (Karasek et al., 1998). The basis for the job demand/control model hypothesis is that those at risk for job strain experience high psychological demands, low decision latitude and low social support (Karasek et al., 1998). Within the model, there is ‘good stress’, which acts as motivation when work demands and decision latitude are both high, enabling behavioral modifications (Karasek et al., 1998, p.323). Conversely, low demands and low decision latitude create an environment where there is lack of motivation; this could cause a regression or loss of skills (Karasek et al., 1998). The third component of the JCQ, social support, has been empirically tested to show that persons with low social support, low decision latitude and high psychological demands have a greater risk of illness (Hall, 2007; Karasek et al., 1998). A four-quadrant representation of the scales measuring psychological demands and decision latitude

demonstrates how occupations fit within the demand/control model (Karasek et al., 1998). Occupations with high levels of demand and decision latitude are grouped together while those with low demands and low decision latitude are in the opposite quadrant. Nurses fit within the high demand/high decision latitude sector. Swaen, Amelsvoort, Bultmann, Slangen and Kant (2004) found that employees who had mentally demanding occupations and had conflict with supervisors or peers were more likely to be injured on the job. Hall (2007) completed research on psychosocial job factors found low supervisor social support correlated with increased turnover in hospital nurses. Men with a history of high blood pressure in a high strain job showed high systolic pressure during work hours in one study (Theorell & Karasek, 1996). Men and women across six high strain occupations also had significantly elevated systolic blood pressure measured at work (Theorell & Karasek, 1996). Elevations in systolic blood pressure progressed with increasing levels of job strain (Theorell & Karasek, 1996).

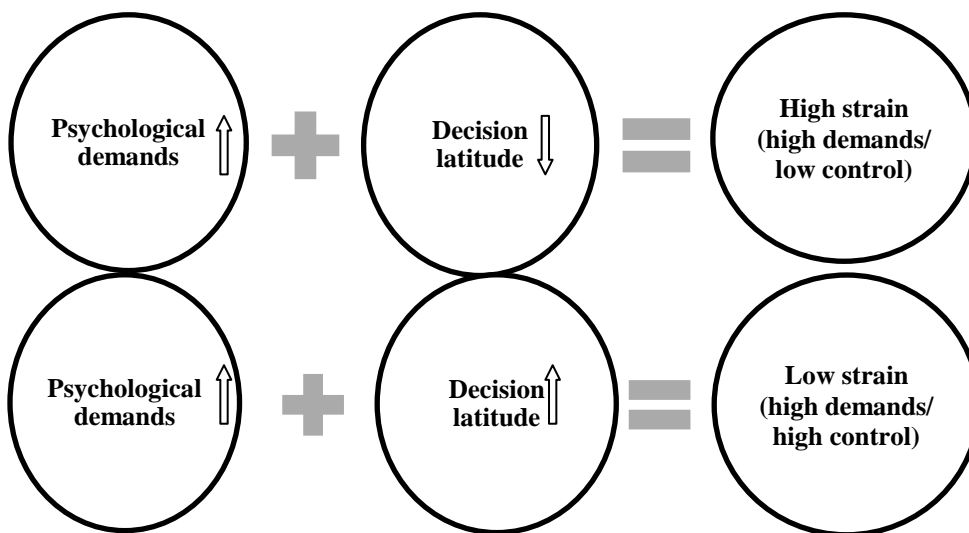


Figure 1.3: Job demand/control model

Significance of the study

According to the National Sample Survey of Registered Nurses (NSSRN) compiled by the Health Resources and Services Administration (HRSA), in 2008 the average age of a nurse was 46 years, with 10.7% of nurses being over 60 years old. An almost equal number of nurses (10.6%) were under the age of 30 years (HRSA, 2010). Despite the equal number of nurses at the beginning of their careers and those nearing retirement, 59.2% of registered nurses working in their profession in 2008 were over 45 years of age (HRSA, 2010). The nursing workforce is aging. Despite the recent increase in nurses entering the workforce, there is still a projected nursing shortage that will be approximately 260,000 in 2025. (Buerhaus, Auerbach and Staiger, 2009). This shortage is assumed to be of greater impact because the supply of nurses is unlikely to meet the demands of an aging society with complex comorbidities (Buerhaus et al., 2009). Further, replacement of the nursing workforce to compensate for turnover will be compounded when nurses leave due to retirement

A stressful work environment (29.6%), inadequate staffing (20.1%), lack of leadership (27.8%) or desire to change to a different position (29.5%) were common causes nurses cited for leaving a job (HRSA, 2010). Burnout (16.6%) and personal problems with coworkers (10.4%) were additional reasons selected by those who left a nursing position (HRSA, 2010). Nurse managers experiencing burnout are less likely to have supportive communication with staff. Supervisory support that is lacking cascades downward to affect perceptions of the work environment (Laschinger & Finegan, 2008). Emphasis on a healthy work environment is noted in current literature (Gerardi &

Fontaine, 2007; Heath, Johnson & Blake, 2004). Communication, collaboration and support of nursing autonomy and leadership have been described as components of a healthy work environment (Heath et al., 2004). A vast amount of literature demonstrates that working in an unhealthy environment has negative physical and psychological effects (Karasek, 2008; Karasek, 1979; Schnall, Landsbergis & Baker, 1994). The impact of these variables will be discussed further in Chapter 2.

Values have been defined as motivating traits that are stationary throughout a person's adulthood (Bardi & Schwartz, 2003). Rokeach (1968) identified value as a guiding principle that leads to the development of attitudes about aspects in one's life, real or theoretical. Job security may be of higher importance to those towards the end of their career, while those in the beginning stages may not be tied to one job, facility or organization. This study provided insight into the values of nurses, whether their values influenced intent to leave, and enriched what is known about today's nursing workforce.

Decision latitude, operationally defined as independent usage of skills and autonomy in completion of tasks, is a means by which nurses can transform their work environment (Karasek et al., 1998). Social support may provide respite for those with high psychological demands, but there is a gap in the literature when variables in the study are added to the equation. Organizational or job commitment has been examined in relation to individual characteristics such as demographic variables. Commitment has been explored in the context of psychosocial job characteristics or work values. No studies were found that examined the relationship of all variables in the study or with the outcome of intent to leave.

Knowledge gained from this study has implications for the current nursing workforce in terms of the work environment and retention. Results from this study contribute to what is already known about values, psychosocial work characteristics and intent to leave. Each individual variable already has significant literature to describe foundational concepts. However, no one has explored this combination of factors in a multivariate model and combined them with demographic data on gender, education, weekly hours worked, years of experience and years in current position. The knowledge garnered by this study will provide managers with information to tailor retention programs to fit the needs of their staff. The answers to the following questions will be investigated.

Research Questions

1. Are there value differences between hospital nurses who intend to leave and those who do not?
2. Are there differences in psychosocial work characteristics between hospital nurses who intend to leave and those who do not?
3. Are there differences in individual characteristics between hospital nurses who intend to leave and those who do not?
4. What are the relationships of values, psychosocial job and individual characteristics and intent to leave among hospital nurses?

Summary

This chapter introduced the study by describing the concepts of values and intent to leave nursing in the context of values theory. The work environment is inclusive of many intangible components that affect the functioning of the nurse in a complex healthcare setting. The job control/demand model was used to describe the relationship of psychological demands, decision latitude and social support in the work environment. A high mental workload, low autonomy in regards to decision-making, and low perceived support from peers and supervisors has been shown to influence nurses to leave.

Chapter Two

Literature Review

The purpose of this review of literature was to identify what has already been determined by previous research and theory regarding the concepts of values, psychosocial job characteristics, and intent to leave. The literature on demographic variables and their relationship with intent to leave was also reviewed. Key words in the search of the literature were intent to leave, turnover, retention, values, work characteristics, theory, decision latitude, psychological demands and social support. The rationale for the current study and what would be added to the field is discussed in this chapter. The values theory and job demand/control model are presented as the theoretical foundation for the study.

Key terms used to find relevant literature for the study include: basic values, work values, professional values, mental workload, psychological demands, decision latitude, autonomy, social support, demographic variables, intent to leave, and anticipated turnover. Literature describing the development of surveys used in the study spanned the past thirty years. Original articles in that time frame on instrumentation were reviewed using the key terms. The Cumulative Index to Nursing and Allied Health Literature (CINAHL) plus with Full Text, Medline, PsycINFO, JSTOR, Journals@Ovid Full Text, Expanded Academic ASAP, ProQuest Research Library, Google Scholar and

Communication & Mass Media Complete were used to find literature. In addition, individual publisher databases were explored: Journals@Ovid LWW Total Access Collection, Blackwell-Synergy, ScienceDirect (Elsevier) and ProQuest Digital Dissertations. Multiple databases were combined during searches of key terms when possible and duplicate articles removed. CINAHL plus with Full Text, Medline, Communication & Mass Media Complete, and Psychology and Behavioral Sciences Collection were merged when searching. The highest yielding terms were basic values (877), psychological demands (210) and mental workload (163). When values were delineated into professional values and work values, the number of articles was greater with 3494 and 1135 each. The lowest number of results returned using the combination of databases was anticipated turnover (19). Basic values was the term with the most literature found on JStor (6071), along with autonomy (1102) and psychological demands (863). Journals@Ovid LWW Total Access Collection and Blackwell-Synergy returned duplicate articles of those already found on other databases. When an abundance of articles was found, such as with JStor and ScienceDirect, the search terms were narrowed into smaller categories related to nursing, organizational and industrial psychology and attitudes. Proquest Digital Dissertations was useful in determining what others had studied in terms of nurses, values, psychosocial job characteristics, and intent to leave. No study was found that incorporated all of the variables in this study to predict intent to leave. Criteria for inclusion of an article in the literature review was based on its relevance to the study concepts. If the abstract was irrelevant to the study, the next abstract was screened. Literature pertinent to the topics studied was also scanned for

references that might be further assessed. The review of literature is divided into the following sections: Values, psychological demands, decision latitude, social support, demographic variables and intent to leave.

Values

Research has shown that those with different values are motivated by different goals. Values may be a factor in whether a nurse chooses to remain in their current job (Leiter, Jackson, & Shaughnessy, 2009; Takase, Maude, & Manias, 2005). More specifically, if someone values security, they will risk less to keep their job. If a person is motivated by hedonistic pursuits, leaving an unfulfilling job that only provides a paycheck will be reasonable. Factors such as age, living situation, weekly hours worked and education may all affect intent to leave a job. For example, a nurse working part-time while obtaining a higher degree may exhibit self-direction. Values can also impact actions. McNeese-Smith and Crook (2003) found altruism to be important to nurses without a bachelor's degree. Aesthetics, creativity and management were valued more by those with bachelor's degrees (McNeese-Smith & Crook, 2003). Achievement was a low priority for those with a master's degree (McNeese-Smith & Crook, 2003). Values theory was explored further to determine what is known about the first research question, *Are there value differences between hospital nurses who intend to leave their position or profession and those who do not?*

Universal values are described by Schwartz (1996) as representing goals. Each goal is derived from three basic human needs: organic needs, reciprocal communication, and continuation of groups (Schwartz, 1996). The ten universal values are power,

achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security (Schwartz, 1996). These values form a circular pattern of tradeoffs. Motivation to be secure means someone is less likely to act in ways that endanger safety or risk loss. Valuing power indicates being successful in the eyes of society, with control of material items and esteem (Schwartz, 1996). Achievement is a value with an underlying goal of doing well in accordance with collective norms (Schwartz, 1996). Hedonism is derived from personal enjoyment or happiness (Schwartz, 1996). Stimulation is based upon an innate need to have variety or innovation in life (Schwartz, 1996). Self-direction has an underlying goal to be self-sufficient in terms of thoughts and action (Schwartz, 1996). Universalism is a value demonstrated through acceptance and protection of others or of nature (Schwartz, 1996). Benevolence is rooted in concern for the wellbeing of others (Schwartz, 1996). Tradition is described as being respectful of group norms, such as with religion or culture, while Conformity is maintaining control of one's actions in order to remain in good stead with accepted societal rules (Schwartz, 1996). Security values involve feeling protected both personally and in groups (Schwartz, 1996).

Schwartz (2005) describes values as being more attainable or easily expressed if conditions allow. Those with wealth may have more opportunities for power, and those raising a family may decide against stimulation or hedonistic values (Schwartz, 2005). Demographic variables will account for some, but not all of this variance. Values are portrayed as being adaptable to circumstances, with importance of certain values over others changing (Schwartz, 2005). Different demographic variables could yield different

value priorities, but there is a knowledge gap when it comes to how demographic variables influence personal values in registered nurses. In general, there is limited literature available on values in registered nurses. Studies found assess professional or work values, but not personal values in registered nurses. Rassin (2010) discovered that personal and professional value priorities in Israeli nursing students (n=180) varied according to ethnicity. Students born in the former Soviet Union rated autonomy as fifth most important whereas Israeli-born students felt it was the most important ($p < 0.01$) professional value (Rassin, 2010). Demographic variables were assessed in a study by Yarbrough, Alfred and Martin (2008). Yarbrough et al. (2008) examined professional values in a random sample of nurses in the United States (n=453). Gender, ethnicity, education, age, years of experience, specialty area, role and type of job were reviewed (Yarbrough et al., 2008). The majority of nurses surveyed were Caucasian (n=368), female (n=428) and had obtained a master's degree (n=256). The mean age was 47.81 and nurses had 28 to 50 years of experience ($\mu=22.93$). The most common job role was as Nurse practitioner (n=101), with 206 (45.5%) nurses working in a hospital setting.

Work role (e.g. staff nurse, administrator, faculty) was found to have a greater influence on professional values by Yarbrough et al. (2008). Differences also existed between nurse administrators (n=56) and staff nurses (n=92) in terms of work environment and practice improvement, which were valued more by staff nurses (Yarbrough et al., 2008). Overall, nurses valued privacy, maintaining dignity and understanding individual liability for actions most (Yarbrough et al., 2008). Values described by Yarbrough et al. (2008) mirror those described by Schwartz (2005):

universalism, benevolence and self-direction. Mean scores for the Nurses Professional Values Scale are reported by the authors but not significance of results (Yarbrough et al., 2008). The research study will provide valuable information on the importance of values and individual characteristics of registered nurses working in a hospital. Age is an individual characteristic described as being a variable possibly affecting value importance by Schwartz (2005). Values are formed during adolescence and will not vary greatly through adulthood (Schwartz, 2005). Historical events (such as the 1969 moon landing), the aging process and life stage can all influence values according to Schwartz (2005).

The Code of Ethics for nurses describes an ethical and moral standard by which nurses practice (ANA, 2001). The values outlined in the Code of Ethics are related to values found within Schwartz's values theory (see Figure 2.1).



Figure 2.1 Values related to provisions adapted from the Code of ethics for nurses with interpretive statements (ANA, 2001).

Research has found that nurses tended to eschew economic returns, prestige and variety as they aged and valued aesthetics more than their younger cohorts (McNeese-Smith and Crook, 2003). Empirical evidence is found in a study by Johnson, Haigh, and Yates-Bolton (2007) nurses values have changed in the span of a generation. The number of students who found it unprofessional to lie to patients doubled between 1983 and 2005 (Johnson et al., 2007). Changing social views may provide a reason for the differences. In 1983, Johnson et al. (2007) states that honesty about health was not as accepted as it is today. Altruism (goodwill) and honesty (truthfulness) are two values similar to values measured in the PVQ: Benevolence and universalism. Schwartz (2005) found benevolence to be the most important value and power to be given the least priority among women and men in seven countries. Based on these results it is anticipated the benevolence value will be most valued of either gender.

Age is described in current literature as related to generational groups. Stereotypes are attributed to behavior and values of each generation in the workforce today. Some of the stereotypes are described in terms of historical events. The baby boom generation is portrayed as putting work ahead of family, whereas generation X desires a work/life balance (Stuenkel et al., 2005). Generation X loyalty is perceived as more difficult to attain with immediate benefits being motivators, while baby boomers may view conditional loyalty as a lack of work ethic (Jurkiewicz, 2000). Baby boomers are described as rule-abiding and domineering by generation X (Apostolidis & Polifroni, 2006). In contrast to their older cohort, there is consensus that there is less job commitment from generation X, and more value is placed on a work/life balance,

diversity, money and self-reliance (Apostolidis & Polifroni, 2006; Clausing Kurtz, Prendeville & Walt, 2003).

Baby boomers experienced war, with this generation being the primary source of military strength during the Vietnam War. Civil rights, the advent of the space program and women's liberation, in the shadow of the Cold War, were all parts of this generation's childhood (Clausing et al., 2003). Optimism is this generation's tenet. According to Clausing et al. (2003), Baby boomers place a high value on personal satisfaction and wealth after growing up in a prospering economy.

Clausing et al. (2003) refer to generation X as not being understood by other generations. The Generation X cohort was often raised in dual income families, or experienced a single-parent household. This gave them the nickname of 'latchkey' kids (Boychuk Duchscher & Cowin, 2004). Those born at the beginning of the generation X time span watched the moon landing as children. As children and young adults, generation X witnessed the Challenger explosion and Black Monday. The Iron Curtain was lifted and computers became personal and portable. The advent of AIDS impacted their social practices. Generation Y is the newest age group in the workplace and have never been without technology. Generation Y may remember their first I-Pod, whereas previous generations remember their first television, microwave oven, computer or videocassette recorder. Generation Y grew up with the internet and has become most able to adapt to technological changes (Cennamo & Gardner, 2008). The Iron Curtain may have been lifted, but this generation has witnessed more terrorism in their own backyards: 24 hour news coverage of the first bombing of the World Trade Center in 1993 and the

Oklahoma City bombing in 1995. As children and young adults, generation Y was inundated with images from the September 11, 2001 attacks. These events on home soil have shaped generation Y during its impressionable years. If there are significant value differences among hospital nurses, age may be a factor.

Age, education, experience, ethnicity and household status

Strachota et al. (2003) found age, education level and years of experience were all indicators as to why nurses left their current position in a sample of 84 registered nurses. Strachota et al. (2003) completed interviews with the nurses via telephone in this exploratory study in a Midwestern health system. More than half (n=44) of nurses who left had practiced for greater than ten years (Strachota et al., 2003). A third of respondents (n=30) had less than four years of experience (Strachota et al., 2003). The most common reason cited for leaving their job was the type and frequency of hours worked (Strachota et al., 2003). A total of 40% of nurses surveyed stated personal reasons for leaving their job, which included care of young children or aging parents (n=19), illness (n=7) and going back to school (n=8) (Strachota et al., 2003). Only 14% (n=12) of nurses held a national certification (Strachota et al., 2003). An associate's degree in nursing (n=36) was the most common 'base' education obtained by participants (Strachota et al., 2003, p.115).

More education was discussed as being evident in those who perceived greater autonomy in their jobs. Nurses working in a smaller, rural hospital were more likely to have obtained associate degrees, while those in urban areas are more likely to be baccalaureate-prepared (Baernholdt & Mark, 2009). Literature discusses age as a factor

in whether a nurse intends to leave their position, with younger nurses more likely to leave their job than nurses with several years of practice experience (Fitzpatrick, Campo, Graham, & Lavandero, 2010; Cox, 2001). Nurses who were closer to retirement also had a greater likelihood of staying in a position due to the desire to not lose time invested into an organization. Weekly hours worked was also an indicator of a greater likelihood to leave when overtime cut into a work-life balance (Strachota et al., 2003).

Age may account for a part of the variance in intent to leave a job among hospital nurses. If stereotypes of different generations within the current literature are to be believed, then age might be a contributor to intent to leave a job or the nursing profession. Shader, Broome, Broome, West and Nash (2001) found nurses ages 38 to 59 years were more satisfied with work and nurses over the age of 59 years were less satisfied (Shader et al., 2001). Pay increases were more important to staff nurses less than 36 years old, compared to staff nurses 36 to 56 years old (Kuhar, Miller, Spear, Ulreich & Mion, 2004). Takase et al. (2009) found differences between the generations in terms of rating needs and value importance in their work. Nurses born 1960 to 1974 rated professional privilege needs and value (autonomy, recognition and variety in job duties) higher than those born in the current generation (Takase et al., 2009). Nurses born 1946 to 1959 valued pay and job security lower than successive generations (Takase et al., 2009).

The effect of ethnicity on intent to leave has not been widely studied in the nursing literature. Schwartz (1999) has determined that cultures share different values or goals. If tradition is a dominant value in a culture, workers will have different

motivations than those cultures who are predominantly oriented to self-direction. In the United States, many different cultures represent the nursing profession. The National Sample Survey of Registered Nurses (NSSRN) data included nurses who were Caucasian non-Hispanic (83.2%), African American (5.4%), Asian (5.5%), Asian/Pacific Islander (0.3%), American Indian/Alaskan (0.3%), Hispanic/Latino (3.6%), and non-Hispanic nurses with two or more ethnic backgrounds (1.7%) (Health Resources and Services Administration, 2008, p.A67).

In terms of capturing all factors that might impact intent to leave, it was determined that household status and relationship to others in household would be used instead of marital status. People who are unmarried but live with a partner would be relegated to choosing the 'single' status. By modeling this variable after the US Census Form (2010), this study would obtain a more accurate representation of why people may or may not intend to leave. If someone was single, yet had a child at home with them, this may also influence whether to stay in a job. The standard marital status question would lose a portion of this population. In 2010, 2.3% of the population surveyed were living with an unmarried partner (Bureau of Labor Statistics, 2012). With whom people live has also been associated with intent to leave in European nurses. A study of 10 European countries found that hospital nurses were five times more likely to leave if living without a partner, spouse, or child. Those living with an adult and a child were less likely to voice intent to leave than their counterparts living with another adult (Estryn-Béhar, Van der Heijden, Camerino, Le Nézet, Conway et al., 2007). Single parents were less likely to voice intent to leave and those living alone more likely to do so (Estryn-Béhar et al.,

2007). This is a logical result, as nurses without responsibility for others could make independent decisions. Persons with financial responsibilities for others or shared property would need to consider how a decision to leave a job would impact the other person or child. A single parent would need to consider the financial hardship of leaving a job or be constrained by child care arrangements.

Urban or rural hospital setting as a predictor of turnover and satisfaction has been examined in previous literature. Baernholdt and Mark (2009) compared nursing units in urban and rural areas using work environment, hospital and unit characteristics, job satisfaction and turnover rates as variables. Vacancy (8.5%) rates were significantly lower in rural settings than urban settings (12.7%, $p < 0.004$), as were number of beds in rural (29.4) and urban (33.8, $p < 0.02$) hospital units (Baernholdt & Mark, 2009).

Years of experience had both negative and positive effects on nurses' perceptions of work environment in the literature (Hinno, Partanen, Vehviläinen-Julkunen & Aaviksoo, 2009). Hinno et al. (2009), found nurses with 11 to 15 years of experience responded with low perceptions of decision latitude and power over their work ($p = 0.0005$ – 0.041). Support from the organization in terms of nursing practice was also perceived to be low in nurses with 10 years of experience ($p = 0.026$) (Hinno et al., 2009). Perceived collaboration with physicians increased with nursing experience (Hinno et al., 2009). Work environment characteristics are reviewed further in the next section.

Psychosocial job characteristics

To determine what is known about psychosocial job characteristics, literature was reviewed that encompassed components of the Job Content Questionnaire (JCQ):

psychological demands, decision latitude and social support. The JCQ originates from data gathered for the United States Quality of Employment Survey (QES) (Karasek & Theorell, 1990). The data from 1969, 1972 and 1977 were combined and partitioned by occupation code into one database of 4503 respondents (Karasek & Theorell, 1990). Multiple occupations were represented, including nurses. It was further revised for use in the Framingham offspring research conducted by the National Heart, Lung and Blood Institute (Karasek & Theorell, 1990).

Karasek and Theorell (1990) found that scores for JCQ subscales of decision latitude, job insecurity and physical demands, were similar between occupations for men. Psychological demands and social support did not account for scale variance between occupations in men. During factor analysis, age was found to be a source of potential bias within occupational groups, especially in terms of psychological demands and social support (Karasek and Theorell, 1990). Decision latitude has a high correlation with social support and negative correlation with physical demands (Karasek and Theorell, 1990). The psychological demand scale does not account for variance between occupations, but other studies support that the components of the psychological demand scale items are valid (Karasek & Theorell, 1990).

Psychological demands

Nurses with time constraints at work, less influence on decisions, and lower appraisals of work quality and communication have been noted in current literature to experience more emotional distress (Gelsema et al., 2006). Gelsema et al. (2006) used a longitudinal design to measure stress in nurses in the Netherlands at two data collection

points. The initial survey yielded a 64% (n=807) rate of response and a 61% (n=381) response rate of nurses still employed in the same position three years later (Gelsema et al., 2006). Nurses reporting greater time limitations, less decision latitude, communication and, evaluation of work had greater mental exhaustion ($p<0.01$) (Gelsema et al., 2006). Nurses with higher evaluations of work, communication and greater decision latitude had significantly less emotional stress ($p<0.01$) (Gelsema et al., 2006). Lavoie-Tremblay, Wright, Desforbes, Gelinas, Marchionni and Drevniok (2008) noted many new generation Y nurses (43.4%) reported psychological distress at work. Results have been varied as to whether psychological distress is a significant cause of turnover, but it has been cited as one reason for leaving a job by nurses (Strachota et al., 2003). Stress in the workplace that was unrelated to interpersonal relationships was a contributor to difficult relationships between nurses in one qualitative, exploratory study (Duddle & Boughton, 2007). Nurses in this study described how the work environment, including how each nurse dealt with the workload, clued them in to whether interactions with other nurses would be difficult (Duddle & Boughton, 2007). Resilience was identified as a coping mechanism to the negativity the convenience sample deemed to be a normal aspect of the job (Duddle & Boughton, 2007).

Increased psychological demands are directly linked to lower satisfaction and organizational commitment when nurse autonomy is lacking (Laschinger, Finegan, Shamian & Almost, 2001). This predictive study used a random sample of Canadian nurses (n=404) to test Karasek's job demand/control model (Laschinger et al., 2001). A significant difference was found between nurses perceiving high and low job strain when

structural empowerment ($t=5.19$, $p= 0.0001$), psychological empowerment ($t=5.27$, $p=0.0001$), work satisfaction ($t=4.87$, $p= 0.0001$) and organizational commitment ($t=3.49$, $p= 0.0001$) was examined ((Laschinger et al., 2001, p. 240). A nurse who is able to make a positive impact on the work environment exhibits autonomy when able to make decisions about their practice.

Decision latitude

Decision latitude is conceptually defined as control over completion of tasks and usage of skills in the work environment (Karasek et al., 1998). Latitude, autonomy and control are all terms used synonymously in literature regarding this concept. Nurse autonomy has been shown to offset job strain experienced by nurses (Laschinger et al., 2001). Greater autonomy in making decisions about professional practice and education is a positive factor influencing nurse retention (Duchene, 2002). Larrabee et al. (2003) found that nurses with less control over daily practice were less likely to stay ($p< .0001$) using a cross-sectional study design of 90 nurses. Facets of the work environment attributed to turnover have included professional efficacy, social support from colleagues, pay, recognition, view of management and legal issues (Obrien-Pallas et al., 2006).

As previously noted, current literature describes that nurses may leave the profession due to lack of autonomy over decisions and policy formulation, use of skills, assignments, and mandatory overtime and call (Obrien-Pallas et al., 2006). Obrien-Pallas et al. (2006) used a nonexperimental study design to examine what factors directly influenced why nurses left. Nurse executives were included in the study and asked what factors were most important in whether a nurse stayed. Factor analysis showed the

greatest contributor to the model explaining why nurses left encompassed the psychosocial job characteristic of social support, including bullying and supportive relationships between nurses (Obrien-Pallas et al. 2006). This factor accounted for 36% of the variance in the model developed to explain why nurses left (Obrien-Pallas et al. 2006). Professional practice issues such as autonomy in decision making, was the third most significant factor, explaining 5.71% of the variance in the model. Factor means showed that nurses left for professional practice reasons ($\mu=2.82$), followed by outside values about nursing ($\mu=2.7$), legal and organizational concerns ($\mu=2.4$), work and home/family issues, ($\mu=1.99$) and contract obligations ($\mu=1.62$). In an occupation that is characterized as high demand/high decision latitude in the job demand/control model, these results show that staff nurses who have left the profession felt there were high demands with professional practice issues, such as autonomy, (Obrien-Pallas et al., 2006). Health status was linked to decision latitude and social support in nurses. Cheng et al. (2000) found that low decision latitude and high psychological demands indicated decreased overall health in female nurses included in the U.S. nurses' health study at two points in time, four years apart ($n=21,290$). The JCQ was used to measure psychosocial work characteristics, while a short health survey measured health status (Cheng et al., 2000). Nurses who self-reported positive health status perceived high decision latitude and social support at work, buffering any increased psychological demands. In contrast, nurses in poor health reported low social support and low decision latitude (Cheng et al., 2000).

Social support

Social support is defined by Karasek et al. (1998) as positive relationships with peers and/or supervisors within the work environment. Social support from supervisors in the work environment may absorb some of the negative effects of job strain and psychological demands of work (Gakovic & Tetrick, 2003). Perceived lack of social support from colleagues was noted in one study to be a significant indicator of intent to leave in new graduate nurses in Japan (Tei-Tominaga & Miki, 2010). Social support is connected to health status. Lack of social support has been associated with increased blood pressure and heart rate (Theorell and Karasek, 1996). AbuAlRub (2004) investigated the effect of social support on job performance in hospital nurses. It was found that social support decreased job stress and increased job performance (AbuAlRub, 2004). Duddle and Boughton (2007) attempted to describe the interactions of nurses and their colleagues in the work environment. Unfavorable interactions were reported by new nurses, while experienced nurses spoke of negativity displayed by new nurses (Duddle & Boughton, 2007). Negative interactions between nurses were resolved in different ways. Avoidance of nurses with whom negative interactions occurred was common (Duddle & Boughton, 2007). Experienced nurses stated that it was second nature to assess the attitudes of colleagues and decide whether or not to avoid them to prevent conflict (Duddle & Boughton, 2007). Being able to cope in a negative environment was deemed to be something that was acquired over time. In contrast, there was evidence of coworker harmony in one study: lack of social support with peers was found in only 9% of those surveyed by Strachota et al. (2003). This is contrary to the majority of literature reviewed

that determined social support was suboptimal in a majority of jobs (Pomaki, Maes & ter Doest, 2004).

In Japan there is a shortage of nurses and also a high turnover rate of newly employed nurses (Tei-Tominaga & Miki, 2010). Results from a longitudinal study utilizing a 22 item Japanese version of the JCQ found correlations with turnover intent and psychosocial job characteristics. Nurses were given the questionnaire, also measuring intent to leave and job readiness, at two points in time six months apart (Tei-Tominaga & Miki, 2010). The total number of participants with useable surveys was 301. The nine hospitals that provided the pool of new nurses were randomly chosen by the authors to account for differences in shift requirements and location, factors which were found in Japan to impact turnover in previous studies (Tei-Tominaga & Miki, 2010). The theoretical framework of the study focused on three phases in a new graduate's development: issues prior to beginning work, issues that arose when starting work and changes that happened during their employment (Tei-Tominaga & Miki, 2010). Subjective health, measured by the General Health Questionnaire (GHQ-12), significantly correlated with job demand, supervisor support and coworker support at the first point of measurement. At the second point in time, there was a change in factors associated with intent to leave. In addition to number of hospital beds, time and place for breaks, job control and support of colleagues were significant ($R=0.670$), explaining 41% of the variance of the statistical model (Tei-Tominaga & Miki, 2010). Additional analysis of the results showed that the health status of new graduate nurses, lack of supervisor support, and lack of coworker support were significant predictors of intent to leave (Tei-

Tominaga & Miki, 2010). Coworker support at all points within the regression model significantly predicted intent to leave (Tei-Tominaga & Miki, 2010).

Intent to Leave

Intent to leave is examined further in this section. Murrells, Robinson & Griffith (2008) investigated job satisfaction as a predictor of nursing turnover at 6 months, 18 months and 3 years, with intention to work as a nurse in the future and currently working as a nurse being variables (Murrells et al., 2008). The authors completed a factor analysis on job satisfaction at the first two intervals. ANOVA, MANOVA, tetrachoric correlation coefficients, structural equation modeling and logistic regression were analytic methods employed by the authors (Murrells et al., 2008). Results indicated that previous intentions to leave do predict intent at later points in time (Murrells et al., 2008). Intent to leave was a stronger predictor of staying in nursing than job satisfaction (Murrells et al., 2008).

Hart (2005) investigated the effect of hospital organizational culture on a registered nurses' intent to leave their positions and profession. Hart (2005) utilized multiple linear regression to determine how demographic variables explained turnover intention in a random sample of nurses, as measured by the Anticipated Turnover Scale. Turnover intent in current job ($p < .05$) had a significant positive correlation with hospital ethical climate ($r = .504$), control of nursing practice ($r = .342$), hospital retention strategy usage ($r = .133$) and employer-provided ethics education ($r = .153$), while gender and patient load had negative correlations (Hart, 2005). Professional turnover had a significant positive correlation with hospital ethical climate, and retention strategies:

continuing education ($r = .146$) and flexible shifts ($r = .131$) (Hart, 2005). A significant negative correlation was found between average patient load ($r = -.176$) and professional turnover (Hart, 2005). Using regression analysis, Hart (2005) found hospital ethical climate was the greatest contributor to the explanation of the variance in turnover intent, followed by number of patients cared for and control over one's nursing practice ($F(3,357) = 22.32, p < .001$).

Hinshaw and Atwood (1984) researched anticipated turnover over a two-year time frame using a sample of 1,597 nurses in 15 Arizona hospitals. Results from the study by Hinshaw and Atwood (1984) showed that predictors of turnover were organizational and professional/occupational satisfaction. A causal model was developed that predicted the impact of length of time the nurse expected to remain in their job when hired, "mobility factors (kinship responsibilities, education and experience); group cohesion on the nursing unit; job stress; control over nursing practice and individual autonomy, organizational work satisfaction and professional job satisfaction and anticipated turnover compared to actual turnover (termination of employment)." (Hinshaw & Atwood, 1984). Job stress was a main factor in determining satisfaction. Turnover in urban hospitals was predicted by group cohesion and initial expectation of tenure. In the critical care nurse population, anticipated turnover was a strong predictor of actual turnover, as was having a baccalaureate degree in various clinical areas (Hinshaw & Atwood, 1984). Hinshaw, Smeltzer and Atwood (1987) found turnover in staff was only weakly predicted by anticipated turnover in a later study.

Literature reviewed varied regarding the beginning or end of a generation (Greene, 2005; Swearingen & Liberman, 2004; Wieck, 2007). Takase, Oba, & Yamashita (2009) evaluated nurse turnover factors from a generational viewpoint in Japan using an exploratory design. Needs and values related to work were assessed (Takase et al., 2009). A convenience sample yielded a response rate of 332 (37%), of which 315 surveys were complete (Takase et al., 2009). Takase et al. (2009) categorized nurses into three groups according to year of birth: 1946 to 1959 (n=56), 1960 to 1974 (n=97) and 1975 to present day (n=162). Using ANOVA, Takase et al. (2009) found differences among nurses in terms of rating needs and value importance in their work. Nurses born 1960 to 1974 rated professional privilege needs and value (autonomy, recognition and variety in job duties) higher than those born in the current generation (Takase et al., 2009). Although not significant, nurses born 1946 to 1959 valued pay and job security lower than successive generations (Takase et al., 2009). Differences in reasons for turnover included excessive workloads and personal relationships outside of work (Takase et al., 2009). The authors recommend that grouping nurses into their respective cohorts may lead to a greater understanding of how to alleviate problems based on group needs and values (Takase et al., 2009).

Lavoie-Tremblay, Obrien-Pallas, G  linas, Desforbes and Marchionni (2008) explored the association between work environment perception and intent to leave in the generation of nurses entering the workforce. Nurses in the sample population were born after August 1, 1980 and received their nursing license in 2004 in Quebec, Canada (Lavoie-Tremblay et al., 2008). Job satisfaction, supervision, work environment and

personal reasons were explored as possible factors that would predict a nurse's intent to leave a current job. A total of 190 participants (61.5%) indicated an intent to leave their current job and 39 participants (12.9%) indicated they intended to leave the nursing profession (Lavoie-Tremblay et al., 2008). In both groups there was a deficit between amount of work and the rewards received from the effort put forth, coupled with a lack of social support (Lavoie-Tremblay et al., 2008). Fifty-two percent of the 84 subjects surveyed had left their jobs after ten years of practice. No nurse had left the profession to take a job in another field.

Strachota et al. (2003) found that 50% of nurses had left their positions because of the amount of overtime, holiday and weekend hours required. Ma, Samuels, and Alexander (2003) set out to identify issues that influence job satisfaction in nurses and whether nurses intended to leave. They found professional, organizational and workload satisfaction were all significant predictors of nurses intending to leave their current position. The average participant was a female with a mean age of 43 years, with 46.81% of participants having an associate degree in nursing and 31.74% with a baccalaureate education (Ma et al., 2003). These statistics mirrors the National Sample Survey of Registered Nurses (NSSRN) data for 2008. (HRSA, 2010). The majority of respondents had worked in an acute care setting and at their current organization for several years. Ma et al. (2003) grouped data within three categories, demographic (age, education, job tenure and salary), institutional (hospital size, job position, setting, retirement plan, and teaching/non-teaching facility type) and geographical location (Ma et al, 2003). The survey had 27 items: job satisfaction was measured using 10 items with a 10-point Likert

scale ranging from very dissatisfied to very satisfied. Cronbach's alpha was .87 when internal consistency reliability was determined for the job satisfaction component of the survey (Ma et al., 2003). Stepwise multiple regression was used to analyze results and backward elimination removed insignificant variables from the final model predicting job satisfaction. Four variables were included in the final model and explained 2% of the variance: years spent in the same job, position, existence of a hospital retirement plan and geographic location (Ma et al., 2003). The researchers found that inadequate staffing was experienced at least twice weekly, with 11.9% experiencing this issue on a daily basis (Ma et al., 2003). Nurses reported no change or a decrease in job satisfaction in the past two years. Hospital setting and size, years of employment and current position were all significant factors affecting job satisfaction using ANOVA (Ma et al., 2003). Greater job satisfaction indicated less likelihood of leaving their current position. When intent to leave the profession was assessed, significant predictors were professional satisfaction and the economic position of the nurse. Nurses unable to leave the profession included those whose families were financially dependent upon them (Ma et al., 2003). Likewise, nurses whose salaries did not have a financial impact on their families were more likely to leave nursing and not work at all outside the home (Ma et al., 2003). There was no significant correlation between age and years of employment, in relation to job satisfaction (Ma et al., 2003). A weakness of the study by Ma et al. (2003) is that it merges secondary data with data collected by the researchers. Responses to surveys may be influenced by history.

Summary

This chapter described the concepts of intent to leave, values and psychosocial job characteristics. It also presented research literature that hints at an association between these concepts in regards to individual characteristics such as age, education, hours worked, relationship to others in a household and years of experience. Yet in reviewing current literature and meta-analyses, no studies were found that examined these variables. This indicates a gap in knowledge. The literature supports the need for further investigation in hospital nurses of values, psychosocial job characteristics, individual characteristics, and intent to leave position.

Chapter Three

Methodology

This quantitative study explored the association among values, psychosocial job characteristics, individual factors and intent to leave in hospital nurses. The purpose of this chapter is to describe the research questions, sample population, pilot study, data collection technique, instrumentation and statistical analysis.

Research Design

An exploratory, cross-sectional survey design was employed to examine the associations between values, individual and psychosocial job characteristics and intent to leave position in hospital nurses. Demographic data was collected to study individual characteristics.

Sample and Setting

The sample and setting for the study were registered nurses currently practicing in hospitals in the Mid-Atlantic region. The pilot study included only nurses working within the Commonwealth of Virginia. Two screening questions were asked at the beginning of the online survey in order to determine inclusion in the study. The first screening question asked if they had completed the survey before. Answering yes automatically directed them to a standard page thanking them for responding. They were unable to answer any further questions. If the participant answered no, they were asked if

they were a registered nurse working in a hospital. If the answer was no, they were directed to a standard survey exclusion page thanking them for responding.

The sample was identified through email, postal mail and an online nursing forum. Nursing leadership in the Commonwealth of Virginia were emailed the survey link to distribute to staff nurses within hospitals via email. A direct mail list of 3000 registered nurse home addresses was purchased from Gannett Healthcare Group using the investigator's own funds. It is derived from a list of registered nurses receiving a free nursing magazine mailed each month to a home address. The list is updated by the United States Postal Service (USPS). The direct mail list included registered nurses in the Mid-Atlantic Region: Delaware, District of Columbia, Pennsylvania, West Virginia, Maryland and Virginia. It was sent to the student researcher through a local direct mail clearinghouse and printer. The investigator's copy of SPSS 16.0 was used to randomly select 300 names from the list. Due to a limitation of 1500 cases in the student version of SPSS 16.0, 150 random names were chosen from participants numbered 1-1500. 150 more names were chosen from participants 1501-3000 using a second query in SPSS.

Participants who received a mailed survey invitation were asked to log on to the SurveyMonkey website. Those participants with a mailed survey invitation were assigned an identification number by the student investigator and asked to enter it in the survey. The number is associated with the mailing list. The student investigator used the identification number to determine who received a reminder postcard. The reminder postcard was mailed ten to fourteen days after the initial survey invitations were mailed. The numbers that had been assigned to each participant's home address were deleted

once used. As an incentive to complete the survey, one dollar bill was included with each invitation. The one dollar gave potential participants a small incentive to encourage them to log on to SurveyMonkey to complete the survey. The investigator opened the online survey link the first week of December 2011, and mailed the survey invitations via USPS two weeks prior to the end of 2011. The investigator mailed the reminder postcards shortly after the start of 2012 and posted the link on Nurse.com in February 2012.

Pilot Study

Prior to conducting the dissertation, a pilot study was completed. The purpose of the pilot study was to identify logistical problems regarding ease of access and format that could occur during the study and might adversely affect data quantity and quality. The mean anticipated time to complete the survey was calculated by using a feature in SurveyMonkey to record the length of time from start to finish. The convenience sample of registered nurses working in a hospital setting were past and current colleagues of the investigator. The email invitation providing the survey link was sent to 14 nurses from the investigator's George Mason University email account to a home email address. Two of the nurses working in different hospitals then forwarded the email to their staff nurse colleagues. The email was circulated to approximately 50 registered nurses in the Commonwealth of Virginia. Human Subjects Review Board (HSRB) approval was obtained for the pilot study. All data were self-reported.

An incentive for completing the survey was offered. Participants were able to enter their email address upon completion for a drawing to win a \$50 Amazon.com gift

card. The survey link on SurveyMonkey.com was closed after three weeks, in October 2011.

Email addresses were downloaded from SurveyMonkey into Excel and assigned a number in the order received on SurveyMonkey. Once in Excel, the number of email addresses was entered as the upper number limit when the formula 'RandBetween' was selected. The formula then returned a random number between 1 and the total number of email addresses. The number that matched the email address received the gift card. It was emailed to the winner from arosenkr@gmu.edu, as stated in the Informed Consent. The email addresses were then deleted from the password-protected computer. All other data collected on SurveyMonkey were downloaded as an SPSS file. Half of the nurses initially contacted were given a verbal reminder that an email with the survey link had been sent. The pilot study results consisted of eight surveys, of which seven were complete. Current status working as a registered staff nurse in a hospital was an inclusionary criterion, and work status was confirmed on the first question of the online survey.

Participants in the pilot study were registered nurses of Asian, non-Hispanic Caucasian or other ethnic backgrounds. All were female and ranged in age from 33 years to 52 years old. Participants had a roommate (n=2), spouse (n=2), lived alone (n=2) or with either a spouse, child or extended family member (n=1). They worked 36 hours per week (n=4), 39 hours per week (n=2), or 40 hours per week (n=1). The highest education level was a bachelor's degree. The nurse with the least experience had been working for 1.8 years. The pilot study population exhibited more psychological demands than decision latitude in the current job. Social support had the lowest mean score, indicating

that despite high psychological demands and decision latitude, nurses did not perceive an equal amount of social support. None of the participants intended to leave their current job or the nursing profession in the next 6 months.

The pilot survey results highlighted the need for additional data and provided data on process changes for the dissertation. Questions were added to the final survey on income from job (in 000's dollars/year), rural location and hospital size. State of residence was added when the Nurse.com link was posted, with choices being the states where data had been collected previously and an option to mark 'other'. Downloading of the pilot study results highlighted an error in website survey design. Issues noted in the transfer of results to SPSS during the pilot study analysis included how multiple responses would translate to multiple questions. '*How are you related to others living in your household?*' Answers then had to be manually assigned a numerical code (1-9) to indicate the responses. Respondents were able to mark more than one answer, which also meant that each combination of answers needed a numerical code to incorporate these responses. Time to complete the survey was recorded in SurveyMonkey by the respondents. The survey required from 10-15 minutes. An informal inquiry was done after the conclusion of the survey; those who received the survey directly from the investigator stated there were 'a lot' of questions, but liked the incentive offered. One participant had difficulty using a smartphone to complete the survey. A few participants reported they felt the survey asked appropriate questions regarding job characteristics.

Power Analysis

Research Questions 1, 2, and 3 determined differences in values (Question 1), psychosocial job factors (Question 2), and individual characteristics (Question 3) between nurses with intent to leave and those who did not intend to leave. Independent t-tests and chi square were used to answer the first three questions. With $p=.05$, a moderate effect size of .5 and power of .8. Cohen's (1992) sample size estimation was $n=64$ ($N = 128$). Research Question 4 examined the relationships of values, psychosocial job factors and individual characteristics and intent to leave among hospital nurses. In determining the sample size needed for the regression analysis, the variables to include were derived from previous literature: values, psychosocial job factors, age, number in household, relationship to others in household, weekly hours worked, ethnicity, gender, years in current job, years of experience and education level. Stepwise regression is the method of analysis used to determine predictors of intent to leave from values, psychosocial job characteristics and individual characteristics. Stepwise selection of variables provides for selection of significant predictors based on statistical criteria alone. Tabachnick and Fidell (2001) recommend its use in exploratory studies using large samples that are representative of the population studied. Tabachnick and Fidell (2001) recommend calculating sample size as $104+n$ for multiple regression. Since there is no prior study using the instruments together, the goal was to obtain at least 130 participants. Despite the efforts to recruit additional participants, a final sample of 113 nurses was obtained for regression analysis. Power is less than .8 due to the number of predictors used, using a medium effect size of .15 (Tabachnick & Fidell, 2001).

Data Analysis

All analyses were conducted using the statistical software program SPSS: Version 16.0 (pilot study) and 19.0 (dissertation). Independent t-tests, chi square, bivariate correlations, and stepwise regression were used to answer the research questions.

Instrumentation

An online survey site, SurveyMonkey, was used to collect responses from participants recruited by electronic mail, postal mail and an online nursing discussion forum. A SurveyMonkey™ Pro subscription was purchased for the study. SurveyMonkey is an online survey tool. SurveyMonkey provides survey templates that range from multiple choice to free text with unlimited questions per survey. Up to 1000 responses can be received with the SurveyMonkey™ Pro subscription. A survey template was used that allowed for Likert scale questions. The consent form was the introductory page of the survey on SurveyMonkey. To prevent multiple responses from one person, participants were asked to agree to complete only one survey (see Figure 3.1).

<p>I acknowledge that I have not completed this survey before and agree to complete this survey only once.</p> <p><input type="radio"/> yes</p> <p><input type="radio"/> no</p>

Figure 3.1 Agreement for survey completion

Measures

Portrait Values Questionnaire

The PVQ was developed from the Schwartz Values Survey and Values theory for use in different populations. Schwartz et al. (2001) determined use of the PVQ would provide greater strength to the values theory but be easier for a broad group of people to understand. The PVQ is gender-specific, with a male and female version of the survey. Questions are formed with ‘she’ or ‘he’. Respondents are asked to state how similar they are to each person’s portrait. For example, the following portrait from the PVQ measures the value security:

“It is important to him to live in secure surroundings. He avoids anything that might endanger his safety” (Schwartz, 2005, p. 286).

A man who states this portrait is ‘very much’ like him demonstrates he places a high priority on the value security. In the female version of the PVQ, the gender is changed.

It is important to *her* to live in secure surroundings. *She* avoids anything that might endanger *her* safety” (Schwartz, 2005, p. 286).

If this portrait does not describe the person completing the survey, then security is not a motivating goal in life. If this portrait is very much like the person, then security is a value that is important in life. The portrait does not determine if someone is secure, just that the value is of little or significant importance in life. The PVQ is scored by calculating the mean of each value and the total mean of each participant response, comprised of all ten values (Schwartz, 2001). Scores are adjusted for individual differences by subtracting the mean PVQ from each mean value score. The higher the

adjusted average, the greater the importance placed upon the value. Reliability and validity for the PVQ are reported in Table 3.1. Test-retest reliability was determined with a sample of university students in Israel (n=67). Schwartz, Melech, Lehmann, Burgess, Harris and Owens (2005) report the reliabilities of the PVQ are similar to those found in the Schwartz Values Survey (SVS). Security (.88) had the highest reliability while self-direction (.66) was lowest (Schwartz et al., 2005). Schwartz et al. (2001) determined convergent and discriminant validity of the values measured by the PVQ by comparing to the SVS. Single trait-multimethod correlation analyses were computed and correlations for each of the ten values was significant ($p < .001$). This indicated that the driving force behind each value was the same regardless of how it was measured.

Job Content Questionnaire

The JCQ is a survey that measures the psychosocial characteristics of one's job. Five subscales comprise the 49 question JCQ: decision latitude, psychological demands and mental workload, social support, physical demands and job insecurity (Karasek et al., 1998). The social support dimension includes assessment of interpersonal hostility (Karasek et al., 1998). Only the first three subscales of the JCQ were used in this research: Decision latitude, psychological demands and mental workload, and social support (Karasek et al., 1998). A total of 19 items are included under decision latitude, 9 items for psychological demands and mental workload, and 11 survey questions make up the social support dimension of the JCQ (Karasek et al., 1998). Nursing is categorized as a high demand, high decision latitude occupation. Scoring is done through a set of formulas included in the JCQ user manual (see Table 3.1). The JCQ is organized so that

subscales can be omitted if not pertinent to the objectives of the researcher. An analysis by the author of whether users were utilizing the shorter format or the longer, recommended version found that only 58% of 130 projects employed the physical demands portion (Karasek et al., 1998). Only 36% of users included the job insecurity questions (Karasek et al., 1998). Table 3.1 presents reliability of the JCQ. Predictive validity was determined (Karasek et al., 1998).

Anticipated Turnover Scale

The Anticipated Turnover Scale (ATS) (Hinshaw & Atwood, 1984) was used to determine intent to leave a nursing position, or anticipated turnover in nursing position (see Table 3). The 12-item ATS measures intent to leave on a 7-point Likert scale format (Hinshaw & Atwood, 1984). Reliability and validity are presented in Table 3.2. The seven options in the ATS are *agree strongly (AS)*, *moderately agree (MA)*, *slightly agree (SA)*, *uncertain (U)*, *slightly disagree (SD)*, *moderately disagree (MD)*, and *disagree strongly (DS)* (Hinshaw & Atwood, 1984). Items are either positive or negative: items 2, 4, 5, 7, 11, and 12 are positive while 1, 3, 6, 8, 9 and 10 are negative (Hinshaw & Atwood, 1984). If the item is positive, then it is scored on a scale of 7 to 1, with *AS* being 7 points and *DS* being 1 point (Hinshaw & Atwood, 1984). A negative survey question is scored from 1 to 7 points, with *AS* being equal to 1 point, and *DS* equal to

Table 3.1: Quantitative Variable Measurement and Analysis

Variables	Instrument	Items	Scale	Range	Sample Size	Reliability	Validity
Values	Portrait Values Questionnaire (Schwartz et al., 2001)	40	6 point Likert	1 to 4	Italy: 5870 Uganda:840 S. Africa:3493	Cronbach's alpha =.37-.79* Test-retest reliability .66-.86	Construct validity using single method matrix correlations
Intent to leave	Anticipated Turnover Scale (Hinshaw & Atwood, 1984)	12	7 point Likert	1 to 7	1525	Cronbach's alpha= .84 Θ coefficient=.88	Principal Components Factor Analysis and Predictive Modeling Techniques explained 54.9% of the variance
Psychosocial job characteristics	Job Content Questionnaire (Karasek et al., 1998)	33	4 point Likert	Decision latitude: 24 to 96 Psychological job demands: 12 to 48 Social support: 8 to 32	4500	Cronbach's alpha=.63-.84	Factor Analysis

*Schwartz et al. (2001) noted that significant Cronbach's alpha were not anticipated due to the limited number of items measuring each of the ten values in the PVQ.

7 points (Hinshaw & Atwood, and Atwood, 1984). A score of 1 would not indicate intent to leave a nursing position, while a score of 7 would indicate intent to leave a nursing position (Hinshaw & Atwood, 1984). Internal consistency reliability this instrument is reported as 0.84 (Hinshaw and Atwood, 1984). Construct validity of the ATS determined that 54.9% of the results could be explained by two factors in the model (Hinshaw & Atwood, 1984). Construct validity was determined using factor analysis and predictive modeling (Hinshaw & Atwood, 1984). Correlation, multiple and discriminant regression were used to analyze data (Hinshaw & Atwood, 1984).

Individual characteristics

Individual characteristics were measured using questions with multiple-choice response. Hinshaw, Smeltzer and Atwood (1987) describe age, education, kinship responsibilities, years of experience and length of time working with their current employer as ‘mobility factors’. In this study, kinship responsibilities will be determined by a question regarding household relationships status. The United States 2010 Census survey is used as a model (U.S. Census Bureau, 2010). In the U.S. Census 2010, upon writing the name of the head of household, people were asked to list others living at the current address and the relationship of those persons (see Figure 3.2). Participants in this study will be asked if they live with others and if so, the relationship to those people living in the same household: Spouse, boarder, roommate, unmarried partner or other nonrelated person will be among the choices (U.S. Census Bureau, 2010). Race, educational preparation, weekly hours worked, years of experience and years in current position were also assessed.

How is this person related to Person 1? Mark ☒ ONE box.

<input type="checkbox"/> Husband or wife	<input type="checkbox"/> Biological son or daughter
<input type="checkbox"/> Adopted son or daughter	<input type="checkbox"/> Stepson or stepdaughter
<input type="checkbox"/> Brother or sister	<input type="checkbox"/> Father or mother
<input type="checkbox"/> Grandchild	<input type="checkbox"/> Parent-in-law
<input type="checkbox"/> Son-in-law or daughter-in-law	<input type="checkbox"/> Other relative
<input type="checkbox"/> Roomer or boarder	<input type="checkbox"/> Housemate or roommate
<input type="checkbox"/> Unmarried partner	<input type="checkbox"/> Other nonrelative

Figure 3.2 Household status. Adapted from United States Census 2010 form, p. 2. Copyright 2010 United States Census Bureau.

Data Collection Procedure

The dissertation utilized postal and electronic means, employing simple random sampling of a direct mail list. Nursing leadership within the Commonwealth of Virginia were sent the survey invitation via email to distribute among hospital staff nurses. Additional participants were recruited on an online nursing discussion forum.

The direct mail list request included only registered nurses in the Mid-Atlantic Region: Delaware, District of Columbia, Pennsylvania, West Virginia, Maryland and Virginia. The database was sent in Excel format via email through a mail clearinghouse per Gannett Healthcare Group. A total of 300 invitations and envelopes were printed by the clearinghouse (MDI). The investigator's copy of SPSS 16.0 was used to generate the random sample by choosing 'Select case' and 'random sample'. Due to a limitation of 1500 cases in the student version of SPSS 16.0, 150 random names were chosen from

participants 1-1500 using the approved technique. The same technique was used to choose an additional 150 names from participants 1501-3000 for a total of 300 participants who will receive the mailed invitation. The \$1 incentive was then placed in the envelope with the invitation.

Survey invitations mailed via USPS were numbered and participants were asked to type the number at the end of the survey. The number corresponded to a number assigned by the investigator. The number was associated with the password-protected mailing list and used to determine non-response home addresses where a post card would be mailed. Ten days after the initial survey invitations and consents were mailed by USPS, those who did not respond received a reminder postcard. The numbers assigned to each participant's home address were deleted upon completion of the data collection. Nursing leaders in the Commonwealth of Virginia were sent the survey link via email to distribute to hospital nurses. The survey link was posted on a Nurse.com discussion forum to obtain additional participants:

https://www.surveymonkey.com/s/GMU_Values_Job_Intent_Survey.

Table 3.2 Job Content Questionnaire Subscale Components

Subscale	Formula	Characteristics	
Decision Latitude = Skill Discretion + Decision Authority	Questions 3-11 (Range 24 to 96)	Learn new things High skill level Develop own abilities	Variety Creativity Repetitive
Skill Discretion	$[Q3 + Q5 + Q7 + Q9 + Q11 + (5-Q4)] \times 2$		
Decision Authority	$[Q6 + Q10 + (5-Q8)] \times 4$	Freedom of choice Make own decisions Says a lot about job	
Psychological Job Demands	Questions 19, 20, 22, 23, 26 (Range 12 to 48) $[(Q19 + Q20) \times 3 + (15(Q22+Q23+Q26))] \times 2$	Work not excessive Enough time for work Demands conflict	Works fast Works hard
Social Support = Coworker support + Supervisor support	Questions 48, 49, 51-54, 56, 58 (Range 8 to 32)	Supervisor concerned Supervisor listens Well-organized supervisor	Helpful supervisor Hostile supervisor
Supervisor Support	$[Q48 + Q49 + Q51 + Q52]$		
Coworker Support	$[Q53 + Q54 + Q56 + Q58]$	Coworkers are helpful Coworkers work together Coworkers competent Hostile coworkers	Coworkers interested Coworkers friendly

Note. Adapted from Karasek (1985). Karasek, Brisson, Kawakami, Houtman, Bongers and Amick (1998).

Method of Analysis

Different methods are available when screening data for missing values and outliers. Replacement of missing values with the sample mean has been used. Marshall, Fisher, Brammer, Eustace, Grech, and Jones, et al. (2007) replaced missing values with the mean of all values and deleted outliers. Brewer et al. (2012) replaced missing values with the mean value for the survey if participants completed at least 50% of that survey. Campo and Darragh (2012) replaced missing values on survey questions if omissions occurred once or twice using the series mean of that scale. Participants missing more than two answers per scale were not used in the analysis (Campo and Darragh, 2012). For the purpose of this study, replacement of missing values was done by calculating the series mean of the question's response and replacing the missing values. If 50% or greater of a questionnaire was missing, that participant's results were excluded. If participants were missing responses for demographic questions, the means, medians and standard deviations of the demographic variable were analyzed for nurses with intent to leave and without intent to leave. If the mean differences were not statistically significant, the missing value was imputed based on intent to leave (ATS score). For example, the mean number of persons in a household for those with intent to leave was 2.8 (*SD* 1.3). If a nurse was missing this data but did have intent to leave based on the dichotomized ATS score, then 2.8 was imputed as number in household for that participant. Outliers were excluded once individual surveys were assessed to determine a cause for outliers.

Descriptive statistics (n, mean, standard deviation) are reported for each variable. Individual factors and other characteristics of nurses who intend to leave and those who

do not were compared using independent t-tests and chi square. Intent to leave, psychosocial job factors, and individual values scores are computed and presented in Chapter 4. Independent t tests were used to determine the answer to research question 1: Are there value differences between hospital nurses who intend to leave and those who do not? An independent t test was also used to answer research question 2: Are there differences in psychosocial job characteristics between hospital nurses who intend to leave and those who do not? Chi square coefficients and independent t tests were computed to determine differences for research question 3: Are there differences in individual characteristics between hospital nurses who intend to leave and those who do not? Stepwise multiple regression was used to answer research question 4: What are the relationships of values, psychosocial job and individual characteristics and intent to leave in hospital nurses?

Ethical Considerations

The study was reviewed by George Mason University Human Subjects Review Board (HSRB) prior to data collection. Completion of research ethics training is required by George Mason University before any research begins. Per HSRB guidelines, the statement that 'reasonable efforts will be made to protect the confidentiality of your transmission' was included on the informed consent form. Results in SurveyMonkey were viewed only by Amanda Rosenkranz. No identifying information was connected to the survey completed on SurveyMonkey. Job Content Questionnaire (JCQ) data, marital status, age, gender, weekly hours worked, income from job, firm size and education level were provided to Dr. Robert Karasek per user agreement of the JCQ. The SurveyMonkey

account is protected by a password known only by Amanda Rosenkranz. No identifying information was requested within the SurveyMonkey questionnaire.

Consent was affirmed by filling out the online survey after reading the invitation to participate and online consent. Nurses were not asked to identify the organization for which they work; no information was shared with their employer. Participants were able to discontinue the study at any point in time. There was no penalty for not completing the survey. Participants were not at risk for harm by answering the survey questions. Participants were not associated with the results of the study. No personal identifiable information is associated with the analyses and results of the study. Survey results were available on SurveyMonkey using only a password known by the student investigator: Per George Mason University Human Subjects Review Board policy, reasonable effort was made to protect the confidentiality of data transmitted online by keeping information password protected. A disclaimer was noted in the pilot study consent that this survey was not associated with Amazon and the gift card was being provided by the researcher as an optional incentive for participating. No other information was collected for this drawing and the email address was not associated with survey results.

Chapter Four

Data Analysis

This chapter will present findings. Descriptive statistics are provided for the research study. Independent t-tests and chi square analyses were used to determine differences between nurses with and without intent to leave in terms of values and psychosocial job characteristics. Individual characteristics of participants were also examined. Stepwise regression analysis was used to determine the relationships between study variables and intent to leave in registered nurses employed in a hospital setting.

Presentation of Data and Results

Of the 300 survey invitations sent by USPS, six people returned the \$1 incentive due to being ineligible after retirement or change in work setting. Five people contacted the student investigator by email after having difficulty accessing the survey link. Three survey invitations were returned undeliverable by USPS. A total of 116 surveys were useable. Pilot study participants were included in the results. Missing data were imputed with variable means after visual examination of results. Demographic questions were missing in eight participants and were replaced with the sample mean. Replaced values included number in house, weekly hours worked, years in current job, and years of experience. Number of employees in the setting was not replaced because 56 responses

were missing on this variable. Twelve participants were missing three responses each on the ATS, JCQ or PVQ scales.

Individual Characteristics

Demographic and individual characteristics are presented in Table 4.1. The sample was dichotomized into two groups: Nurses with intent to leave and without intent to leave based on ATS score. There are equal numbers of items designated as positive or negative on the ATS (Hinshaw & Atwood, 1984). If a participant chooses ‘agree strongly’ to a positively scored item, the answer equals 7. ‘Strongly disagree’ on an item is coded as 1. The inverse is true for negative items (Hinshaw & Atwood, 1984). All items have ‘uncertain’ equal to 4 on the 7-point Likert scale. The reverse scoring of items lowers the ATS score for nurses who agree with items that indicate no intent to leave (Hinshaw & Atwood, 1984). A higher mean ATS score indicates intent to leave.

The ATS scores ranged from 1.9 to 6.0 and the mean for the entire sample was 3.8 (*SD*.569). Participants were dichotomized based on their mean ATS score (Hinshaw & Atwood, 1984). That is, nurses with an ATS score ≥ 4.0 were categorized as having intent to leave, while those with an ATS score < 4.0 were categorized as without intent to leave. A total of 41(35.3%) participants had intent to leave and 75(64.7%) were without intent to leave. The mean ATS for nurses in the sample who intended to leave was 4.36 (*SD* .418), while the mean ATS for nurses without intent to leave was 3.50 (*SD* .380).

The participants ranged in age from 22 years to 74 years old ($M=46.9$). The majority of nurses in the sample were non-Hispanic Caucasian ($n=94$, 81%). The number of persons in a household ranged from 1 to 7 ($M=2.8$). Nurses were least likely to report

living alone (n=13, 11.2%). The most common living arrangement was with either a spouse or child (n=40, 34.5%), followed by spouse and child (n=37, 31.9%). Six persons did not complete the question. Of the participants, the most common level of education attained was a bachelor of science in nursing degree (n=59, 50.9%). An education level of diploma or associate's degree accounted for 41 participants (36.1%). Nurses with a graduate degree (masters degree or doctorate) were the least common (n=16, 13.8%).

Job Characteristics

The participants had from 1 to 45 years of nursing experience ($M=20.9$). Nurses had been in their current job for 1 to 43 years ($M=11.9$). The maximum weekly hours worked was 50 ($M=31.5$). The mean annual income of participants was \$61,826. Working in a rural location was reported by 29 participants (25%). The number of employees where the participant worked varied among the 60 participants who responded to the question ($M=4584.6$).

Intent to Leave

A histogram was produced and showed a normal distribution of mean ATS scores for participants. For this study, nurses with an ATS score ≥ 4.0 exhibit intent to leave, while those with an ATS score < 4.0 are without intent to leave. Reliability analysis for the ATS confirmed strong reliability: Cronbach's $\alpha = .885$ (standardized items $\alpha = .890$). Comparatively, Cronbach's alpha was .84 for the study testing the ATS by Hinshaw and Atwood (1984).

Table 4.1 Demographic and Individual Characteristics of Nurses with and without Intent to Leave (ATS)

		Total Sample* N=116	Nurses with intent to leave n=41	Nurses without intent to leave n=75	Comparison of nurses with and without intent to leave (p value)**
Age, $M \pm SD$		46.9 \pm 10.7	46.0 \pm 11.0	47.4 \pm 10.6	.511
Gender	Female, n(%)	108(93.1)	39(95.1)	72(92.3)	.526
Ethnicity, n(%)	Non-Hispanic Caucasian	94(81)	33(80.5)	61(82.0)	.912
	Other	22(19)	8(19.5)	14(18.0)	.912
	Total	116(100)	41(100)	75(100)	.912
Number in household, $M \pm SD$		2.8 \pm 1.3	2.8 \pm 1.3	2.7 \pm 1.4	.679
Relationship to others in household	No one else	13(11.2)	5(12.2)	8(10.7)	.803
	Spouse or child	40(34.5)	14(34.1)	26(34.7)	.955
	Spouse and child	37(31.9)	14(34.1)	23(30.7)	.701
	Other relationships	20(17.2)	7(17.1)	13(17.3)	.972
	Unknown	6(5.2)	1(2.4)***	5(6.7)	
	Total	116(100)	41(100)	75(100)	.898
Education, n (%)	Diploma or Associate Degree(ADN)	41(35.3)	13(31.7)	28(37.3)	.545
	Bachelor of Science Nursing (BSN)	59(50.9)	25(61.0)	34(45.3)	.107
	Graduate or Doctoral Degree	16(13.8)	3(7.3)***	13(17.3)	
	Total	116(100)	41(100)	75(100)	.179
Years in current job, $M \pm SD$		11.9 \pm 9.5	12.2 \pm 10.2	12.1 \pm 1.1	.822
Years experience, $M \pm SD$		20.9 \pm 10.9	19.7 \pm 11.7	21.6 \pm 10.4	.381
Income, $M \pm SD$		61826.3 \pm 20858.4	56122.0 \pm 22300.4	64944.6 \pm 19478.8	.029
Number of employees, $M \pm SD$ (n=60)		4584.6 \pm 12934.7	6412.68 \pm 20996.6	3526.29 \pm 3665.2	.410
Rural location, n(%)		29 (25.0)	10(24.4)	19(25.3)	.911
Weekly hours worked, $M \pm SD$		31.5 \pm 12.1	30.7 \pm 13.4	31.9 \pm 11.3	.605

* n=60 for Number of employees. **Independent t-test for comparison of means and chi square for categorical variables *** Expected cell count less than five, insufficient data to compute chi square

Research Questions

Research Question One

The purpose of the first research question was to determine if there were differences in values between hospital nurses. An independent samples, 2-tailed t-test was performed after descriptive statistics were determined. Table 4.2 displays PVQ descriptive statistics after centering the ten values around each participant's mean PVQ score. Scores for the total sample ranged from 1.4 to 4.1. Higher scores for values indicate a higher priority is placed on that value by the participant. The highest value score was for power for those with intent to leave ($M=1.52$, $SD .833$). The lowest value score was for benevolence for nurses with intent to leave. ($M=.896$, $SD .613$). Mean PVQ score was not significant between those with and without intent to leave ($p=.638$). Reliability analysis of the gender-specific PVQ indicated strong reliability. Cronbach's $\alpha=.874$ (standardized items $\alpha=.877$) for the female PVQ ($n=108$, 93.1%). Cronbach's $\alpha=.921$ (standardized items $\alpha=.924$) for the male PVQ ($n=8$, 6.9%).

Table 4.2 Differences in Basic Human Values (PVQ) Between Nurses With and Without Intent to Leave (ATS)

Values	Without intent (n=75) <i>M</i> ± <i>SD</i>	Intent to leave (n=41) <i>M</i> ± <i>SD</i>	p value
Conformity	-.248 ±.662	-.329 ±.664	.532
Stimulation	.622 ±.752	.724 ±.976	.562
Self Direction	-.517 ±.569	-.435 ±.467	.429
Hedonism	.133 ±.822	.358 ±.779	.154
Achievement	.472 ±.934	.500 ±.827	.870
Power	1.413 ±.833	1.521 ±.767	.495
Security	-.475 ±.474	-.517 ±.433	.642
Tradition	.388 ±.707	.250 ±.633	.299
Universalism	-.296 ±.659	-.252 ±.583	.720
Benevolence	-.672 ±.525	-.896 ±.613	.041 *
Mean PVQ	2.752 ±.513	2.707 ±.434	.638

*p<.05, two-tailed.

In Table 4.3, equal variances are assumed for each of the values except for stimulation ($t(66.46) = 5.049$, $p = .562$). There was a significant difference in the importance of benevolence between nurses with and without intent to leave per ATS score. Benevolence ($t(114) = 1.794$, $p = .041$) was valued less by nurses with intent to leave ($M = -.896$, $SD .613$) versus those without intent to leave ($M = -.672$, $SD .525$).

Table 4.3 Independent Samples t-test Comparing Basic Human Values (PVQ) Between Nurses With and Without Intent to Leave (ATS)

Values	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig.	95% Confidence Interval	
						Lower	Upper
Conformity	.012	.914	.627	114	.532	-.175	.336
Stimulation ^a	5.049	.027	-.582	66.460	.562	-.452	.248
Self Direction	2.400	.124	-.793	114	.429	-.289	.124
Hedonism	.413	.522	-1.435	114	.154	-.536	.086
Achievement	.271	.604	-.164	114	.870	-.374	.317
Power	.223	.638	-.685	114	.495	-.420	.204
Security	2.201	.141	.466	114	.642	-.135	.219
Tradition	.430	.513	1.042	114	.299	-.124	.401
Universalism	.374	.542	-.360	114	.720	-.288	.200
Benevolence	1.794	.183	2.072	114	.041 [*]	.010	.439

Note. ^aEqual variances not assumed

^{*}p<.05, two-tailed.

Research Question Two

The purpose of the second research question was to determine if there were significant mean differences in psychosocial job characteristics (JCQ) between hospital nurses with and without intent to leave (ATS). A higher score for decision latitude, psychological job demands and social support would indicate a participant has greater perceived decision latitude, psychological job demands and social support at work (Karasek, 1985). Descriptive statistics for psychosocial job characteristics are presented in Table 4.4. Three participants were excluded due to incomplete survey responses on the JCQ ($n=113$). Reliability analysis was conducted to determine Cronbach's alpha for each subscale of the JCQ. Reliability was moderate for decision latitude (Cronbach's $\alpha = .553$) and social support (Cronbach's $\alpha = .598$). Reliability was weak for psychological job demands (Cronbach's $\alpha = .177$).

Scores on the decision latitude subscale of the JCQ range from 24 to 96 (Karasek, 1985). For this study, the total sample mean was 66.89 (SD 11.02). Scores for the psychological job demands subscale of the JCQ range from 12 to 48 (Karasek, 1985). The total sample mean for this study was 37.06 (SD 5.87). Scores for the social support subscale of the JCQ range from 8 to 32 (Karasek, 1985). The mean for this total sample was 23.15 (SD 3.96).

Table 4.4 Descriptive Statistics for Psychosocial Job Characteristics (JCQ) Between Nurses With and Without Intent to Leave (ATS)

Characteristic (<i>M ± SD</i>)	Total sample (N=113)	Nurses without intent to leave (n=73)	Nurses with intent to leave (n=40)	p value
Decision latitude	66.89 ±11.02	66.11 ±11.48	68.30 ±10.10	.91
Psychological job demands	37.06 ±5.87	36.52 ±6.04	38.04 ±5.50	.62
Social support	23.15 ±3.96	22.84 ±3.75	23.73 ±4.30	.94

An independent samples t-test was computed to determine if there were differences between hospital nurses regarding psychosocial job characteristics in relation to intent to leave. Results are displayed in Table 4.5. Equal variances were assumed using Levene's test for equality of differences. No significant differences were found in perceived decision latitude ($t(111) = 1.897, p = .314$), psychological job demands ($t(111) = -1.011, p = .190$) or social support ($t(111) = -1.149, p = .253$) between nurses with intent to leave and nurses without intent to leave.

Table 4.5 Independent Samples t-test Comparing Psychosocial Job Characteristics (JCQ) Between Nurses With and Without Intent to Leave (ATS)

Characteristic	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig.	95% Confidence Interval	
						Lower	Upper
Decision latitude	1.897	.171	-1.011	111	.314	-6.485	2.104
Psychological job demands	.029	.866	-1.318	111	.190	-3.800	.764
Social support	.001	.980	-1.149	111	.253	-2.432	.647

Research Question Three

The purpose of the third research question was to determine whether there were differences in individual characteristics between hospital nurses with and without intent to leave (ATS). Chi square and independent samples t-tests were used to establish the differences in individual characteristics. Chi square analyses for categorical variables found no significant differences between participants with and without intent to leave in regards to gender ($p = .526$), ethnicity ($p = .912$) or working in a rural location ($p = .911$). There was not a significant relationship found between intent to leave and education level of diploma or associate's degree ($X^2 (1, N = 41) = .367, p = .545$), or education level of bachelor's degree ($X^2 (1, N = 59) = 2.595, p = .107$). There was insufficient data for meaningful analyses between graduate level educated nurses with and without intent to leave.

Independent t-tests were used for continuous variables to identify differences between nurses with and without intent to leave. Results are presented in Table 4.6. No significant differences were found between nurses with and without intent to leave for age, number in household, weekly hours worked, years of experience, or number of employees. There was a significant difference between hospital nurses with intent to leave and nurses without intent to leave in regards to annual income ($t(114) = 2.214, p = .029$).

Table 4.6 Independent Samples t-test Comparing Individual Characteristics of Nurses With and Without Intent to Leave (ATS)

Characteristic	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig.	95% Confidence Interval	
						Lower	Upper
Age	.112	.739	.660	114	.511	-2.750	5.499
Number in household	.001	.980	-.416	114	.679	-.630	.412
Weekly hours worked	2.526	.115	.519	114	.605	-3.431	5.865
Years of experience	.938	.335	.880	114	.381	-2.330	6.054
Annual income	1.309	.255	2.214	114	.029*	930.029	16715.269
Number of employees	3.099	.084	-.831	58	.410	-9841.049	4068.265

*p<.05, two-tailed.

Research Question Four

The fourth research question was answered using correlation analysis and stepwise regression to determine what variables were associated with intent to leave between hospital nurses. Continuous and bivariate variables were used to develop the regression model. The three psychosocial job characteristics (decision latitude, psychological job demands and social support), ten basic human values (conformity, stimulation, self direction, hedonism, achievement, security, power, tradition, universalism and benevolence,), mean PVQ score, weekly hours worked, ethnicity, gender, age, highest education level, number in household, years in current job, years of experience and annual income were used as predictor variables. Intent to leave (ATS score) for each participant was the outcome variable. For this analysis the sample was not dichotomized.

Correlation analyses were conducted to determine Pearson product moment correlations (Pearson r) among predictor and outcome variables. Pearson r is reported for individual characteristics, values (PVQ), psychosocial job characteristics (JCQ) and intent to leave (ATS). Results from the correlation analysis for individual characteristics and intent to leave are displayed in Tables 4.7 and 4.8. Years of experience ($r = -.215$, $p < .05$) and ATS had a moderate correlation. As years of experience increased, intent to leave decreased. There was a high correlation between years of experience and years in current job ($r = 0.648$, $p < .01$). Also, age correlated with years in current job ($r = .502$, $p < .01$) and intent to leave ($r = -.188$, $p < .05$). Nurses who had spent more years in their current job were older than their counterparts who had not worked in their current job as long. As the age of nurses in the sample increased, intent to leave was less likely to be present.

Education level was divided into three categories for this analysis: Diploma or associate degree, bachelor's degree, and graduate degree. A bachelor's degree correlated with age ($r = .215$, $p < .05$) and years of experience ($r = .178$, $p < .05$). Nurses with a bachelor's degree were older and had more years of experience than their cohorts. Income was significantly correlated with weekly hours worked ($r = .474$, $p < .01$), years in current job ($r = .382$, $p < .01$) and years of experience ($r = .313$, $p < .01$). The more weekly hours worked, years in current job and years of experience, the higher the annual income.

Table 4.7 Pearson Correlations Among Individual Characteristics and Intent to Leave (ATS)

		ATS	Age	Gender	Ethnicity	Number in household
ATS	r	1				
	Sig.					
Age	r	-.188	1			
	Sig.	.023*				
Gender	r	.003	-.106	1		
	Sig.	.487	.132			
Ethnicity	r	-.105	.012	-.049	1	
	Sig.	.135	.448	.305		
Number in household	r	.107	-.098	-.075	-.088	1
	Sig.	.129	.150	.214	.176	

Note. Gender and ethnicity recoded for analysis.

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

Table 4.8 Pearson Correlations Among Individual Characteristics Related to Job and Intent to Leave (ATS)

		ATS	Weekly hours worked	Years in current job	Years of experience	Income
ATS	r	1				
	Sig.					
Weekly hours worked	r	.064	1			
	Sig.	.249				
Years in current job	r	.007	.017	1		
	Sig.	.469	.429			
Years of experience	r	-.215	-.101	.648	1	
	Sig.	.011*	.143	.000**		
Income	r	-.106	.474	.382	.313	1
	Sig.	.131	.000**	.000**	.000**	

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

Correlation analysis performed for the ten basic human values (PVQ) and outcome variable (ATS) are displayed in Table 4.9. There were no significant correlations found between the ten values and mean PVQ score with intent to leave (ATS). Significant negative correlations were found between hedonism and conformity ($r = -.541, p < .01$), security ($r = -.213, p < .05$), tradition ($r = -.312, p < .01$), universalism ($r = -.324, p < .01$) and benevolence ($r = -.315, p < .01$). This indicates that participants who place a higher priority on the value hedonism deem conformity, security, tradition, universalism and benevolence as lower value priorities. Conformity was found to be a significantly lower value priority when stimulation ($r = -.431, p < .01$), self direction ($r = -.360, p < .01$), power ($r = -.295, p < .01$) had higher value priorities. Significant positive correlations were found between conformity, security ($r = .215, p < .05$) and tradition ($r = .379, p < .01$). This indicates that participants view conformity, security and tradition as higher value priorities when compared to the remaining basic human values.

Table 4.9 Pearson Correlations Among Individual Characteristics and Intent to Leave (ATS)

		ATS	Mean PVQ	Con- formity	Stimu- lation	Self direction	Hedon- ism	Achieve- ment	Power	Security	Tradition	Univer- salism	Bene- volence
ATS	r	1											
	Sig.												
Mean PVQ	r	.107	1										
	Sig.	.252											
Conformity	r	-.114	-.033	1									
	Sig.	.225	.723										
Stimulation	r	.052	.034	-.431**	1								
	Sig.	.583	.714	.000									
Self direction	r	.062	-.160	-.360**	.010	1							
	Sig.	.506	.086	.000	.911								
Hedonism	r	.085	.176	-.541**	.473**	-.005	1						
	Sig.	.365	.059	.000	.000	.957							
Achievement	r	-.037	.213*	-.126	-.003	-.129	.195*	1					
	Sig.	.692	.022	.177	.975	.167	.036						
Power	r	.146	-.074	-.295**	-.051	.079	.164	.336**	1				
	Sig.	.118	.428	.001	.583	.398	.079	.000					
Security	r	-.084	-.106	.215*	-.167	.037	-.213*	-.297**	-.173	1			
	Sig.	.369	.258	.021	.073	.690	.022	.001	.063				
Tradition	r	-.077	-.128	.379**	-.233*	-.295**	-.312**	-.233*	-.342**	-.052	1		
	Sig.	.410	.172	.000	.012	.001	.001	.012	.000	.583			
Universalism	r	.067	-.036	-.016	-.161	-.021	-.324**	-.574**	-.316**	-.088	.270**	1	
	Sig.	.473	.702	.865	.084	.820	.000	.000	.001	.345	.003		
Benevolence	r	-.127	-.005	.102	-.290**	-.076	-.315**	-.343**	-.370**	.011	.005	.270**	1
	Sig.	.176	.953	.275	.002	.420	.001	.000	.000	.908	.958	.003	

* p < .05, two-tailed.

** p < .01, two-tailed.

Pearson correlations were computed for each psychosocial job characteristic (JCQ) and intent to leave (ATS). No significant correlations were found between ATS and decision latitude ($r = .036$, $p = .702$), psychological job demands ($r = .067$, $p = .475$) or social support ($r = .110$, $p = .239$). A strong positive correlation was found between decision latitude and social support ($r = .500$, $p = .000$). In their work setting, nurses with greater decision latitude perceive greater social support.

Table 4.10 displays the final model. Years of experience, years in current job and hedonism were the predictors. The beta weight for years of experience ($\beta = -.432$, $p = .001$) indicates that nurses with more years of experience do not intend to leave their jobs. Nurses with more years in current job ($\beta = .249$, $p = .037$) and having hedonism ($\beta = .190$, $p = .046$) as a higher value priority are more likely to have intent to leave than nurses with less years in current job and different value priorities. Years of experience, years in current job and hedonism explained 9.2% of the variance in the model ($R^2 = .116$, $p < .004$). Hedonism was not significant when an independent samples t-test was performed ($t(114) = -1.435$, $p = .154$). Hedonism was second to benevolence, the most significant value priority for nurses with intent to leave. In stepwise regression, hedonism might have become more significant when all other variables were added to the regression. Analysis of variance for the predictor variables indicated $R (.341)$ was significantly different from zero $F(3, 109) = 4.782$, $p < .05$.

Table 4.10 Regression Analysis of Predictors of Intent to Leave (ATS) Between Hospital Nurses ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.065	.107		37.877	.000
Years of experience in nursing:	-.022	.006	-.432	-3.566	.001
Years in current job:	.014	.007	.249	2.108	.037
Hedonism	.128	.064	.190	2.018	.046

Note. ^aDependent Variable: ATS Total

Residual statistics for the model were examined and are presented in Table 4.11. Assumptions of normality and homoscedasticity were tested by assessing scatterplot, histogram and normal P-P plots. Both assumptions were met because the plots and histogram show a normal distribution. The model provides some information on what predictor variables in this sample contribute to the variance of intent to leave.

Table 4.11 Residual and Predicted Scores for Intent to Leave Model

	Minimum	Maximum	<i>M</i> ± <i>SD</i>
Predicted value	3.270	4.270	3.812 ± .186
Residual	-1.645	2.076	-.012 ± .536
Std. predicted value	-2.912	2.435	-.014 ± .995
Std. residual	-3.146	3.969	-.023 ± 1.025

Summary

Significant differences in benevolence were found between nurses with intent and without intent to leave. No significant differences in decision latitude, psychological job demands or social support were found between nurses with intent and without intent to leave. Significant differences in income were found between nurses with intent and without intent to leave. Significant predictors of intent to leave found in the sample were years of experience, years in current job and hedonism. Chapter 5 will review the findings from the study, the implications for nursing, and make recommendations for further research.

Chapter Five

Introduction

The purpose of this chapter is to provide a discussion of the study results in relation to current literature. Key findings, policy implications for nursing, limitations of the study and recommendations for future research on intent to leave are presented.

Summary of Key Findings

Nurses with intent to leave ($M = -.672$, $SD .525$) had a significantly higher mean score for the value of benevolence than nurses without intent to leave ($M = -.896$, $SD .613$, $p = .041$). Nurses without intent to leave prioritized benevolence higher than nurses with intent to leave. When psychosocial job characteristics were examined, there was no difference between nurses with intent and nurses without intent to leave on mean scores of decision latitude, psychological demands and social support. There were no significant differences between nurses with and without intent to leave when examining age, gender, ethnicity, number in household, relationships to others in household, education, years in current job, years experience, number of employees, rural location, or weekly hours worked. There was a significant difference in mean income. Nurses with intent to leave ($M = 56122.0$, $SD 22300.4$) had significantly lower income than nurses without intent to leave ($M = 64944.6$, $SD 19478.8$, $p = .029$). Significant predictors of intent to leave were years of experience ($\beta = -.432$, $p = .001$), years in current job ($\beta = .249$, $p = .037$) and the

value hedonism ($\beta = .190, p = .046$). Nurses without intent to leave had more years of experience than their counterparts with intent to leave. Nurses with intent to leave had more years in their current job and prioritized hedonism higher than nurses without intent to leave.

Values

Schwartz (2003) has described actions as being guided by the importance of basic human values. Values theory describes a circular structure of basic human values, with similar values adjacent to one another and contrasting values in opposition to each other (Schwartz et al., 2001). Values with similar motivations are grouped within four dimensions. The objective of the first research question was to determine if there were significant differences in values between nurses with and without intent to leave. There was a significant difference between those with intent to leave and those without intent to leave in prioritization of benevolence. Benevolence is a value in Schwartz's values theory that is within the self-transcendence dimension (Schwartz, 2006). Persons who prioritize benevolence higher than any other basic human values have been described as helpful to others, truthful, merciful, faithful and dependable (Ros et al., 1999, p. 52). In describing the structure of value relations in values theory, Schwartz (2006) states that benevolence is more important to those concerned for the well-being and function of their close groups. In contrast, values theory describes those who prioritize hedonism higher than other values as being motivated by self-gratification and pleasure (Schwartz, 2006). Hedonism is conceptually defined as doing things for personal enjoyment (Schwartz, 1992). Schwartz (2006) found hedonism to be closely associated with the openness to

change dimension, though it is the only value shared with another aspect: Self-enhancement. Although there was no significant difference in bivariate comparisons between nurses with and without intent to leave on the value of hedonism, nurses with intent to leave scored higher (intent to leave $M = .358$, $SD .779$; without intent to leave $M = .133$, $SD .822$, $p = .15$) and hedonism was a significant predictor of intent to leave in the final regression model, accounting for 2.5% of the variance. These findings support the idea that nurses motivated to pursue self-gratifying goals will intend to leave a job that does not meet their expectations of happiness or pleasure.

Age has been discussed as being positively correlated with self-transcendent motivators such as benevolence (Schwartz, 2003). This was not found in this study. A negative correlation was found between age and benevolence that was not significant ($r = -.022$, $p = .409$). In this study we did not find a significant difference in age between nurses with intent to leave (mean age = 46.0 years, $SD 11.0$) and those without intent to leave ($M = 47.4$ years, $SD 10.6$). This finding was not always mirrored in current literature on intent to leave.

While there was a significant difference in benevolence between nurses with and without intent to leave in bivariate analysis, benevolence was excluded in the final model predicting intent to leave ($\beta = -.087$, $p = .362$). Partial correlation for benevolence and intent to leave ($-.088$) indicated that the relationship was not significant when hedonism is also included in the regression model. Self-enhancement (hedonism) and self-transcendence (benevolence) have opposing motivations. Schwartz and Rubel (2005)

confirmed the contrasting relationship of benevolence and hedonism in four studies consisting of 127 multicultural groups.

Psychosocial Job Characteristics

Nursing is categorized as a high demand, high decision latitude occupation in the job demand/control model used as a framework for the psychosocial job characteristics portion of the study. It theorizes that when decision latitude is increased and perceived psychological demands at work are either increased or decreased, job strain is low (Karasek et al., 1998). When psychological job demands are high and decision latitude is low, adverse physical and psychological effects result in job strain (Karasek et al., 1998). Low social support increases risk of job strain in this scenario (Karasek et al., 1998). The purpose of the second research question was to determine if there were significant differences in psychosocial job characteristics between nurses with intent to leave and nurses without intent to leave. In this study there were no differences between nurses with intent and without intent to leave on decision latitude, psychological demands and social support. Increased psychological demands corresponded with a decrease in social support or decision latitude, but the result was not significant. Increased social support was associated with increased decision latitude, but the relationship was not significant.

Decision latitude, psychological job demands and social support were not predictors of intent to leave. The opposite has been reported in literature. Hart (2005) determined that a sample of nurses (N=463) working in hospitals who reported high level of autonomy in their job were significantly more likely to stay than nurses who perceived less autonomy ($B = .104, p < .05$). Kovner et al. (2009) also found a high level of

autonomy corresponded to a greater intent to stay ($B = .081, p < .05$) in a sample of recently graduated registered nurses ($N=1,635$). The 2008 NSSRN (HRSA, 2010) states the primary reason registered nurses changed jobs was due to demands of the work setting. Past studies have linked lower decision latitude with increased psychological distress (Gelsema et al., 2006). Tei-Tominaga and Miki (2010) found that increased psychological distress led to increased intent to leave in nurses. It has also been cited as a reason nurses leave their jobs by Strachota et al. (2003).

In this study, bivariate correlations determined that decision latitude was significantly correlated with income ($r = -.304, p < .01$). Nurses with lower perceived decision latitude had lower income. Psychological job demands had a significant correlation with weekly hours worked ($r = .191, p < .05$). Nurses who worked more hours perceived greater psychological job demands. Social support has been referred to as a shield between psychological demands at work that inhibit health and well-being (Vartiainen, Avallone, & Anderson, 2000). In this study, it is possible that social support and decision latitude acted as buffers to increased psychological demands in those without intent to leave. Lavoie Tremblay et al. (2010) reported that the effect of social support on psychological distress at work was mediated by individual factors related to the organization. This study found that social support was not significantly correlated with psychological distress. Literature has shown that lack of social support from nurse colleagues leads to intent to leave and turnover (Shader et al., 2008, Tei-Tominaga & Miki, 2010). Spector (2000) hypothesized that the cause for unexpected results (results not fitting with the theoretical model) may be related to differences in the occupations of

the respondents. For example, nurses may have higher decision latitude and social support, but it may not be enough to counterbalance psychological demands. Teachers may have different perceptions of decision latitude, psychological demands and social support than nurses. Job Content Questionnaire data is divided by occupational group, demonstrating that differences in psychosocial job characteristics exist (Karasek, 1985).

Individual Characteristics

There were no significant differences between nurses with intent and without intent to leave when examining age, gender, ethnicity, number in household, relationships to others in household, education, years in current job, years experience, number of employees, rural location, or weekly hours worked. There was a significant difference in income, with those intending to leave having significantly lower income ($M = 56122.0$, $SD 22300.4$, $p=.029$). The median income for all study participants was \$47,000. This is less than estimates previously found in literature. The 2008 National Sample Survey of Registered Nurses (NSSRN) reported median earnings by geographic region. Registered nurses working in mid-Atlantic hospitals had a median income of \$62,000 (Health Resources and Services Administration, 2010). Literature has shown that dissatisfaction with salary can be a catalyst for nurses to leave their jobs (Flinkman, Laine, Leino-Kilpi, Hasselhorn, & Salenterä, 2008). Brewer et al. (2009) confirmed the relationship between turnover and income when they determined nurses with lower income who expressed intent to leave were more likely to leave within one year.

Two individual characteristics were included in the final predictive model for intent to leave: years of experience and years in current job. Nurses without intent to

leave had more years of experience than their counterparts with intent to leave. This is supported in the literature. Strachota et al. (2003) found nurses who had fewer years of experience were more likely to leave. There may be several reasons for the importance of years of experience in predicting intent to leave. The more years of experience a nurse has, the greater likelihood they fall into the Baby boomer cohort. Nurses who are closer to retirement may stay in their current job so as not to lose time invested in an organization (Baernholdt & Mark, 2009). Nurses may also have found a job that meets their needs; finding the grass is not always greener on the other side of the fence. Nurses satisfied with their jobs, who had greater decision authority, higher salary and level of expected tenure when hired, friends in the workplace and group unity were less likely to leave a job (Hinshaw & Atwood, 1983). Younger staff with less kinship responsibilities were more likely to leave (Hinshaw & Atwood, 1982). Fitzpatrick et al. (2010) also found younger staff more likely to leave their jobs than those with many years of experience. Hinshaw and Atwood (1982) found a strong job market increased the likelihood of turnover in nurses. Kovner et al. (2009) determined that as job prospects increased, job satisfaction decreased. Low job satisfaction has been linked to increased turnover (Kovner et al., 2009).

The final regression model accounted for 9.2% of the total variance of intent to leave ($R = .341$, $R^2 = .116$). Analysis showed years of experience ($R = .215$, $R^2 = .046$) contributed 3.8% and years in current job ($R = .289$, $R^2 = .083$) contributed 2.9% to the total variance of intent to leave in the model. Stone, Mooney-Kane, Larson, Pastor, Zwanziger, and Dick (2007) found nursing experience to be a significant predictor of

intent to leave in a sample of intensive care nurses (N = 837): nurses with between 1 and 1.5 years of experience were more likely to leave than nurses with 10 to 11.5 years of experience ($p < .05$). Years of experience as a predictor of turnover is also confirmed by Strachota et al. (2003), who found that nurses with the least years of experience were more likely to leave.

The exclusion of other variables could be due to their contribution in predicting intent to leave in the company of more significant variables already added during stepwise regression analysis. Variables not measured in this study but found in other literature could account for the other 90.8% of the variance of intent to leave, such as job satisfaction, type and length of hours worked, and strength of job market. Job satisfaction is one such variable that has been discussed extensively as a predictor of intent to leave in current literature (Kovner et al., 2009; Gregory et al., 2007; McCarthy et al., 2007; Larrabee et al., 2003). The abundance of nursing job satisfaction literature provided little incentive to add anything new to what is already known. Another possible predictor not measured is the type of work hours, not just the number of weekly hours worked. Strachota et al. (2003) found the most common reason for leaving a job was the shift worked, length of shifts and weekend and holiday requirement. Flinkman et al. (2006) determined that shift work and working hours were reasons that 26% of Finnish nurses were considering leaving the nursing profession (N = 147). More local job opportunity has been shown to increase the likelihood of intent to leave in nurses (Hinshaw & Atwood, 1982; Kovner et al., 2009).

Implications

Despite the recent increase in nurses entering the workforce, there is still a projected nursing shortage that will be approximately 260,000 in 2025. (Buerhaus, Auerbach & Staiger, 2009). Demographically, age groups that will succeed the largest generation in the nursing workforce, the baby boom generation, are smaller (Kimball & O'Neil, 2001). Intent to leave is a concept researched extensively and has been depicted as the final stage before the action of actual resignation (Hinshaw et al., 1987, McCarthy, Tyrrell & Lehane, 2007). It is crucial to focus on ways to retain nurses, maintaining the nursing workforce to accommodate the needs of the growing chronically ill population. This study determined differences between nurses with and without intent to leave, and three predictors of intent to leave.

Nurses that expressed intent to leave had a significantly lower income than nurses who did not state intent to leave. On average, it can cost over \$36,000 to replace a nurse (The Lewin Group, 2009). Increasing financial incentives or providing additional benefits might persuade nurses to remain in the workplace longer. Providing across the board raises to hourly rates would be difficult for organizations in what has been an economy in recession. Other incentives may prove just as valuable. This includes increasing the paid time off accrual rate slightly. When in a metropolitan area with numerous work choices, accruing time off at a faster rate than other healthcare facilities would be an advantage for organizations in recruitment and retention. Other potential policy implications for organizations related to income include provision of selected benefits to part time staff. In the metro Washington D.C. region alone, a variety of options exist for nurses who need

benefits but cannot commit to full time hours. Some hospitals provide no benefits for nurses working part time hours, usually classified as 16, 24 or 32 weekly hours. Other hospitals provide a scaled back version of full time benefits. For example, nurses working 24 hours weekly may accrue hours at a rate that is 60% of what full time staff earns. Insurance benefits provided to a part time employee cost the employee more in order to recoup the cost to the organization. Nurses who want to earn the most, whether it be in hourly pay or benefits, will work or stay at the hospital that provides this for them.

Nurses who valued hedonism more than other values were more likely to express intent to leave. Valuing hedonism meant nurses believed that their own happiness and pleasure was a priority over other values. An opposing value of hedonism is benevolence, in which the well-being and pleasures of others is deemed more important individual well-being and satisfaction. If unsatisfied or discontented by their job, nurses would intend to find another job that would fulfill their hedonistic values. There is not a way to change what nurses value, but the values of nurses can be determined using behavioral interviewing techniques. If potential nursing recruits are asked about their values in relation to an ideal work setting and how they act in adverse conditions, nursing leadership can make assumptions on how the person fits into the organization. Scenarios could be provided to the potential recruits in the interview. How the potential employee responds may guide nursing leaders in making hiring decisions. If a nurse's values are aligned with an organization's mission or purpose, they should be recruited. If nurses respond with comments that focus on their own comfort, without mention of colleagues,

patients or families, nurse leaders can assume that the values do not align with that of the organization. No job offer would be provided until an appropriate candidate is found.

Accelerated programs to educate entry level nurses are proliferating across the country, but this does not address the loss of the expert clinician due to retirement, or the nurse faculty shortage. Nurses with fewer years of experience in this study were more likely to express intent to leave. Reasons nurses with less years of experience intend to leave should be explored by nurse leaders. Grouping nurses into cohorts by years of experience is an option for organizations. Nurses could be surveyed on a regular basis to determine what satisfies or dissatisfies them. If nurses with fewer years of experience lack social support or decision latitude but perceive high psychological demands, strategies can be developed to improve support and autonomy. Improvements to the work environment could be made, such as having a platform for nurses to share governance for policy changes. Though not predictors of intent to leave in this study, literature indicated these concepts influence intent to leave, mental and physical health in nurses. Adding job satisfaction as a variable may provide a greater explanation of what years of experience, years in current job and hedonism contribute to the variance of intent to leave.

Possible implications for nursing leaders are to devise ways to provide outlets for new nurses to express their goals. Providing a way for nurses to be mentored is one way to build social support at work. Cyr (2005) found that 40% of nurses responding to a survey were in favor of a program to mentor their successors, with a financial incentive to maintain the older generation of nurses. One healthcare organization formed focus groups to identify strategies for nurse retention (Mion, Hazel, Cap, Fusilero, Podmore &

Szweda, 2006). Educational offerings, collaboration with a local university, volunteer programs for nurses and technological innovations to decrease physical demands of being at the bedside were solutions (Mion et al., 2006). One year after implementation of the changes, turnover had decreased, morale had increased and retention of older nurses had improved (Mion et al., 2006). More inquiries into the new programs and roles that had been developed were also noted by the authors (Mion et al., 2006).

Limitations of the study

This study does have limitations. The sample for the pilot study was one of convenience. The sample for the study was drawn from a mailing list, with a stratified technique used to determine who on the list received an invitation. The list was purchased from a company that regularly updated their list of registered nurses receiving a regional nursing magazine. Nurses who choose to receive the free magazine may not be representative of the general registered nurse population.

Self-reported data was collected from participants. A limitation of this type of data is that participants may respond in a way that is more socially desirable (Polit & Beck, 2004). Safeguards to maintain anonymity and privacy against responses that may not reflect the true feelings of the participant were used. Even with these precautions, meaningful or significant analyses may not be able to be computed. Attempting to collect data from the online survey created its own unique issues. A hospital email account is provided where pilot study participants worked, but attachments and the ability to open links within emails is dependent upon organizational security firewalls. Internet access is restricted, as is the use of social media while working. The survey may not capture all of

the nuances of factors predicting intent to leave. There is no way to determine if any of the participants followed through on their intent by leaving their job or the profession. Due to concerns about response rate, efforts were made to obtain the number of responses projected to be needed for significant analyses. The number of useable surveys may have hindered the ability to fully explain variability in the regression model.

Even with these precautions, meaningful or significant analyses may not be able to be computed. Reliability for the psychological demands subscale of the JCQ was low in this study, but has been reported acceptable for other studies. Karasek et al. (1998) discuss that differences do exist across population groups, gender and occupations, but prior studies determined Cronbach's alpha indicated strong reliability. Cronbach's alpha for the psychological job demands scale has been reported at .73 and .74, for men and women respectively (Karasek et al., 1998). There is also a concern that this sample may not be representative of a national sample of nurses. The NSSRN is the primary source of nursing occupational data in the United States, with state, regional and national differentiations (HRSA, 2010). Demographic data compared to the most recent quadrennial NSSRN in 2008 showed differences in individual characteristics and how data was collected. Nurses in the NSSRN had a greater sample size with more male participants. Education level proportions within the NSSRN were different from this study. In the NSSRN, 56% of staff nurses working in hospitals were diploma or associate degree prepared, 40.1% were bachelor's degree prepared and 3.8% had obtained a graduate level nursing degree. In this study, 35.3% (n = 41) of nurses had a diploma or associate degree, 50.9% (n = 59) had a bachelor's degree, and 13.8% (n = 16)

were graduate degree prepared nurses. Annual hours worked was reported for NSSRN participants, with the sample dichotomized into two groups: full time and part time.

Only hospital nurses were included in this study, so results may not generalize to other settings in which nurses work, such as clinics or academia. Different work settings may have other unique characteristics, such as weekly hours worked, range of benefits or scheduling that otherwise influence intent to leave.

Data collection was challenging. A mix of postal and electronic communication was employed to improve response rate. A \$1 incentive was used when the invitation was mailed to 300 potential participants in the mid-Atlantic region. When response rate was less than optimal, potential solutions were reviewed in literature. There was conflicting literature on the best approach for improving response rates. Diaz de Rada (2005) found persons with less education were more likely to respond to a mailed survey than those with more education. Persons in the age range of 35 to 64 years old were more likely to respond to interviews via phone or in person (Diaz de Rada, 2005). Barr, Spitzmuller & Stuebing (2008) suggest that those overloaded by the demands of their jobs are less likely to complete a survey given by the organization for which they work. All direct contacts of the investigator reported regularly utilizing home email addresses more often than email provided by the organization for which they work. If nurses worked 36 hours weekly, it was stated multiple times it was unlikely they would check their organization's email system on days off. Diaz de Rada (2005) found groups that had the least response to a mailed survey were those in Generation X and Generation Y. Role conflict was also discussed in literature as influencing response rates. Persons who lack an understanding

of the role and responsibility of their job or who are conflicted at work by multiple demands are less likely to complete a survey at work (Barr et al., 2008). The study methodology was amended to provide the survey link on an online nursing forum (Nurse.com). This boosted results to over 160 participant surveys, but inclusion criteria and missing data resulted in only 113 surveys with complete data for all variables.

Power analysis for the study found that with the number of predictors used in the stepwise regression for the final sample, power was less than .8. The exploratory nature of the study and expert advisement resulted in its use. The rationale was that choosing what variables to include may have caused bias in contrast to statistical criteria. Since no theoretical testing was occurred, the exploratory nature of the study supported its use despite the limitation in power.

Stepwise multiple regression was employed to determine what predictors may be significant in determining intent to leave. Stepwise multiple regression has its own limitations. No forward or backward stepping is employed to exclude variables in the final model. Therefore, the final model is inclusive of variables that are significant in the presence of variables already added to the model. A variable might be significant in the absence of other variables, but not in the presence of other independent variables and is then excluded by the computer program. This analysis was used because of the nonexperimental nature of the study. Bonferroni corrections are sometimes used when testing multiple independent variables at the same time, such as during this study. It decreases the chance that a false positive result will occur, but in doing this type of adjustment to alpha, the risk increases that a false negative result would occur.

Bonferroni corrections for multiple comparisons were not performed due to the exploratory nature of the study.

Recommendations

In order to improve nursing retention, it is important for organizations to assess underlying characteristics of the work environment and individuals that contribute to intent to leave. Assessment of nurses' basic values might help to guide organizational strategies to decrease turnover rates. Since intent to leave is a precursor to actually leaving, surveying nurses may provide data into what unit characteristics are present that can lead to increased intent to leave. One strategy that has been recommended is to provide nurses with a variety of incentive choices (Shader et al., 2001). A standard incentive package across an institution may not appeal to all nurses at various career stages (Shader et al., 2001). Assessing nurses' needs and desires for their jobs can lead to innovative retention strategies, improve job satisfaction and diminish intent to leave (Shader et al., 2001).

The finding that nurses with less years in a current job have greater intent to leave provides the rationale for the recommendation of developing cohorts for nurses newly hired into an organization. Cohorts can meet on a regular basis for the first year to 18 months to discuss problems and develop solutions. If not already employed by an organization, shared governance groups can be a way for nurses with fewer years of experience to achieve autonomy, as long as nurses are rotated and new members included regularly. Future studies which delve deeper into the most significant causes of intent to leave, provide interventions for those causes, and measure the outcomes are needed.

Conclusion

In conclusion, intent to leave is not predicted by a single factor. Nor do the multitude of factors used in this study pinpoint the largest contributing cause of the variance of intent to leave. Despite the limitations of the study, findings are important to nursing leadership for policy formulation. Hedonism, years in current job and years of experience all predicted intent to leave. Nurses who intend to leave may be persuaded to stay if changes are made that provide financial incentives or consider personal value priorities. Nurses with more years of experience seeking employment would be valuable to recruit by the organization, as they intended to stay. Nurses with less years in their current job should be assessed on a regular basis and provided the support they need to stay. This support includes creation or improvement of tangible and intangible benefits. Prevention is key to retention. If a nurse anticipates leaving, a window of opportunity exists to retain the knowledge and experience that may be lost when the nurse leaves. This study imparts evidence of why intent occurs and provides avenues for nurse leaders to explore that keep intent from morphing into actual turnover.

Appendix A
Instrumentation

I work as a staff nurse in a hospital Yes No

Please choose the state in which you live:

District of Columbia ____

Virginia ____

Delaware ____

Maryland ____

Pennsylvania ____

West Virginia ____

Age ____

Number who live in your household (include yourself): 1 2 3 4 5 6 7+

How are you related to others living in your household?

____ No other people live with me (skip to the next question)

They are my:

____ Spouse

____ Unmarried Partner

____ Roommate/Boarder

____ Parent

____ Child

____ Extended Family(Aunt, Uncle, Grandparent, parent/son/daughter-in law)

____ Other nonrelative

Ethnicity:

____ African American or Black

____ American Indian or Alaska Native

____ Asian

____ Non-Hispanic Caucasian

____ Hispanic

____ Pacific Islander

____ Other

Weekly Hours Worked ____

Years in Current Job ____

Years of Experience in Nursing: ____

Highest Level of Nursing Education:

- ____ Diploma
- ____ Associate's Degree Nursing (ADN)
- ____ Bachelor of Science Nursing (BSN)
- ____ Master of Science Nursing (MSN)
- ____ Master's Nursing Administration (MNA)
- ____ Doctor of Philosophy Nursing (PhD)
- ____ Doctor of Nursing Science (DNSc)

Do you live in a rural location? Yes No

Annual income from job: \$____,000 per year

Firm/workplace size: ____ people

Gender: _____Female
_____Male

Anticipated Turnover Among Nursing Staff

ANTICIPATED TURNOVER SCALE

by

(Hinshaw, A.S. and Atwood, J.R.)

Response Options

AS	=	Agree Strongly
MA	=	Moderately Agree
SA	=	Slightly Agree
U	=	Uncertain
SD	=	Slightly Disagree
MD	=	Moderately Disagree
DS	=	Disagree Strongly

Directions: For each item below, circle the appropriate response. Be sure to use the full range of responses (Agree Strongly to Disagree Strongly)

Options

AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS
 AS MA SA U SD MD DS

Item

1. I plan to stay in my position awhile.
2. I am quite sure I will leave my position in the foreseeable future.
3. Deciding to stay or leave my position is not a critical issue for me at this point in time.
4. I know whether or not I'll be leaving this agency within a short time.
5. If I got another job offer tomorrow, I would give it serious consideration.
6. I have no intentions of leaving my present position.
7. I've been in my position about as long as I want to.
8. I am certain I will be staying here awhile.
9. I don't have any specific idea how much longer I will stay.
10. I plan to hang on to this job awhile.
11. There are big doubts in my mind as to whether or not I will really stay in this agency.
12. I plan to leave this position shortly.

ATS: Rev 8/84 c1984 Ada Sue Hinshaw, Jan R. Atwood, University of Arizona Hospital, Tucson, AZ 95724

1. Do you intend to leave your position in the next 6 months? Yes__ No__
2. Do you intend to leave the nursing profession in the next 6 months? Yes__ No__

Person Profiles IVM

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Put an X in the box to the right that shows how much the person in the description is like you.

HOW MUCH LIKE YOU IS THIS PERSON?

	Very much like me	like me	some- what like me	a little like me	not like me	not like me at all
1. Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. It is important to him to be rich. He wants to have a lot of money and expensive things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. He thinks it is important that every person in the world be treated equally. He believes everyone should have equal opportunities in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It's very important to him to show his abilities. He wants people to admire what he does.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. He thinks it is important to do lots of different things in life. He always looks for new things to try.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. He believes that people should do what they're told. He thinks people should follow rules at all times, even when no-one is watching.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. He thinks it's important not to ask for more than what you have. He believes that people should be satisfied with what they have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. It's very important to him to help the people around him. He wants to care for their well-being.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Being very successful is important to him. He likes to impress other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. It is very important to him that his country be safe. He thinks the state must be on watch against threats from within and without.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. He likes to take risks. He is always looking for adventures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. It is important to him to be in charge and tell others what to do. He wants people to do what he says.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. He strongly believes that people should care for nature. Looking after the environment is important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Religious belief is important to him. He tries hard to do what his religion requires.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. It is important to him that things be organized and clean. He really does not like things to be a mess.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. He believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. He thinks it is important to be ambitious. He wants to show how capable he is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. He thinks it is best to do things in traditional ways. It is important to him to keep up the customs he has learned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Enjoying life's pleasures is important to him. He likes to 'spoil' himself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. It is important to him to respond to the needs of others. He tries to support those he knows.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. He believes he should always show respect to his parents and to older people. It is important to him to be obedient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. He wants everyone to be treated justly, even people he doesn't know. It is important to him to protect the weak in society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. He likes surprises. It is important to him to have an exciting life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. He tries hard to avoid getting sick. Staying healthy is very important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Getting ahead in life is important to him. He strives to do better than others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Forgiving people who have hurt him is important to him. He tries to see what is good in them and not to hold a grudge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. It is important to him to be independent. He likes to rely on himself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Having a stable government is important to him. He is concerned that the social order be protected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. It is important to him to be polite to other people all the time. He tries never to disturb or irritate others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. He really wants to enjoy life. Having a good time is very important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. It is important to him to be humble and modest. He tries not to draw attention to himself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. He always wants to be the one who makes the decisions. He likes to be the leader.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. It is important to him to adapt to nature and to fit into it. He believes that people should not change nature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Schwartz, S. H. (2005). *Basic human values: An overview, Human values: Theory methods, and applications*. <http://segr-did2.fmag.unict.it/Allegati/convegno%207-8-10-05/Schwartzpaper.pdf>

Person Profiles IVF

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Put an X in the box to the right that shows how much the person in the description is like you.

	HOW MUCH LIKE YOU IS THIS PERSON?					
	Very much like me	like me	some- what like me	a little like me	not like me	not like me at all
1. Thinking up new ideas and being creative is important to her. She likes to do things in her own original way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. It is important to her to be rich. She wants to have a lot of money and expensive things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. She thinks it is important that every person in the world be treated equally. She believes everyone should have equal opportunities in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It's very important to her to show her abilities. She wants people to admire what she does.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. It is important to her to live in secure surroundings. She avoids anything that might endanger her safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. She thinks it is important to do lots of different things in life. She always looks for new things to try.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. She believes that people should do what they're told. She thinks people should follow rules at all times, even when no-one is watching.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is important to her to listen to people who are different from her. Even when she disagrees with them, she still wants to understand them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. She thinks it's important not to ask for more than what you have. She believes that people should be satisfied with what they have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. It is important to her to make her own decisions about what she does. She likes to be free to plan and to choose her activities for herself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. It's very important to her to help the people around her. She wants to care for their well-being.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Being very successful is important to her. She likes to impress other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. It is very important to her that her country be safe. She thinks the state must be on watch against threats from within and without.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. She likes to take risks. She is always looking for adventures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. It is important to her always to behave properly. She wants to avoid doing anything people would say is wrong.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. It is important to her to be in charge and tell others what to do. She wants people to do what she says.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. It is important to her to be loyal to her friends. She wants to devote herself to people close to her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. She strongly believes that people should care for nature. Looking after the environment is important to her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Religious belief is important to her. She tries hard to do what her religion requires.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. It is important to her that things be organized and clean. She really does not like things to be a mess.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. She thinks it's important to be interested in things. She likes to be curious and to try to understand all sorts of things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. She believes all the world's people should live in harmony. Promoting peace among all groups in the world is important to her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. She thinks it is important to be ambitious. She wants to show how capable she is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. She thinks it is best to do things in traditional ways. It is important to her to keep up the customs she has learned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Enjoying life's pleasures is important to her. She likes to 'spoil' herself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. It is important to her to respond to the needs of others. She tries to support those she knows.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. She believes she should always show respect to her parents and to older people. It is important to her to be obedient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. She wants everyone to be treated justly, even people she doesn't know. It is important to her to protect the weak in society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. She likes surprises. It is important to her to have an exciting life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. She tries hard to avoid getting sick. Staying healthy is very important to her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Getting ahead in life is important to her. She strives to do better than others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Forgiving people who have hurt her is important to her. She tries to see what is good in them and not to hold a grudge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. It is important to her to be independent. She likes to rely on herself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Having a stable government is important to her. She is concerned that the social order be protected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. It is important to her to be polite to other people all the time. She tries never to disturb or irritate others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. She really wants to enjoy life. Having a good time is very important to her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. It is important to her to be humble and modest. She tries not to draw attention to herself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. She always wants to be the one who makes the decisions. She likes to be the leader.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. It is important to her to adapt to nature and to fit into it. She believes that people should not change nature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Job Content Questionnaire

Please answer each question by checking off the one answer that best you're your job situation. Sometimes none of the answers fits exactly. Please choose the answer that comes closest to your response.

3. My job requires that I continually learn new things.
Strongly disagree *disagree* *agree* *strongly agree*
4. My job involves a lot of repetitive work.
Strongly disagree *disagree* *agree* *strongly agree*
5. My job requires me to be creative.
Strongly disagree *disagree* *agree* *strongly agree*
6. My job allows me to make a lot of decisions on my own.
Strongly disagree *disagree* *agree* *strongly agree*
7. My job requires a high level of skill.
Strongly disagree *disagree* *agree* *strongly agree*
8. On my job, I have very little freedom to decide how I do my work.
Strongly disagree *disagree* *agree* *strongly agree*
9. I get to do a variety of different things on my job.
Strongly disagree *disagree* *agree* *strongly agree*
10. I have a lot of say about what happens on my job.
Strongly disagree *disagree* *agree* *strongly agree*
11. I have an opportunity to develop my own special abilities.
Strongly disagree *disagree* *agree* *strongly agree*
12. How many people are in your work group or unit?
I work alone *2-5 people* *6-10 people* *10-20 people* *20 or more people*
- 13A. I have significant influence over decisions in my work group or unit.
I work alone *Strongly disagree* *disagree* *agree* *strongly agree*
- 13B. My work group or unit makes decisions democratically.
I work alone *Strongly disagree* *disagree* *agree* *strongly agree*
14. I have at least some chance that my ideas will be considered about company policy
 (e.g.-hiring, firing, wage levels, new equipment purchases, etc.)
Strongly disagree *disagree* *agree* *strongly agree*
15. I supervise other people as part of my job.
No *yes, 1-4 people* *5-10 people* *11-20 people* *more than 20 people*
16. I am a member of a union or employee association
yes *no*
17. My union or employee association is influential in affecting company policy
I am not a member *Strongly disagree* *disagree* *agree* *strongly agree*
18. I have influence over the policies of the union or employee association.
I am not a member *Strongly disagree* *disagree* *agree* *strongly agree*
19. My job requires working very fast.
Strongly disagree *disagree* *agree* *strongly agree*
20. My job requires working very hard.
Strongly disagree *disagree* *agree* *strongly agree*

Job Content Questionnaire

22. I am not asked to do an excessive amount of work.
Strongly disagree *disagree* *agree* *strongly agree*
23. I have enough time to get the job done.
Strongly disagree *disagree* *agree* *strongly agree*
26. I am free from conflicting demands that others make.
Strongly disagree *disagree* *agree* *strongly agree*
27. My job requires long periods of intense concentration on the task.
Strongly disagree *disagree* *agree* *strongly agree*
28. My work is often interrupted before they can be completed, requiring attention at a later time.
Strongly disagree *disagree* *agree* *strongly agree*
29. My job is very hectic.
Strongly disagree *disagree* *agree* *strongly agree*
32. Waiting on work from other people or departments often slows me down on my job.
Strongly disagree *disagree* *agree* *strongly agree*
48. My supervisor is concerned about the welfare of those under him or her.
Strongly disagree *disagree* *agree* *strongly agree*
49. My supervisor pays attention to what I am saying.
Strongly disagree *disagree* *agree* *strongly agree*
50. I am exposed to hostility of conflict from my supervisor.
Strongly disagree *disagree* *agree* *strongly agree*
51. My supervisor is helpful in getting the job done.
Strongly disagree *disagree* *agree* *strongly agree*
52. My supervisor is successful in getting people to work together.
Strongly disagree *disagree* *agree* *strongly agree*
53. People I work with are competent in doing their jobs.
Strongly disagree *disagree* *agree* *strongly agree*
54. People I work with take a personal interest in me.
Strongly disagree *disagree* *agree* *strongly agree*
55. I am exposed to hostility or conflict from the people I work with.
Strongly disagree *disagree* *agree* *strongly agree*
56. People I work with are friendly.
Strongly disagree *disagree* *agree* *strongly agree*
57. People I work with encourage each other to work together.
Strongly disagree *disagree* *agree* *strongly agree*
58. People I work with are helpful in getting the job done.
Strongly disagree *disagree* *agree* *strongly agree*

Karasek, R. A. (1985). *Job Content Questionnaire and user's guide*. Los Angeles: Department of Industrial and Systems Engineering, University of Southern California.

Appendix B
Permission for Instruments

November 30, 2007

Amanda Rosenkranz, MSN, RN, Doctoral Student

George Mason University

12195 Lincoln Lake Way, #6205

Fairfax, Virginia 22030

arosenkr@gmu.edu

703-222-0738

Dear Doctoral Student Rosenkranz:

Thank you for your recent email in which you requested information about instruments in the Anticipated Turnover Among Nursing Staff study (#R01 NU00908). We are pleased to be able to share this information with you, including its use in your dissertation research on nurse retention.

Enclosed you will find the Anticipated Turnover Scale along with the scoring key, validity and reliability estimates obtained on our sample. You have permission for use, and we trust this information will be helpful.

If we can be of any other assistance to you, please let us know: (520) 825-8298. Also, we would request that you share any information regarding the process of using the instrument and the results or outcomes of its use. We wish you much success in your research.

Sincerely,

Jan R. Atwood, PhD, RN, FAAN
Professor Emerita, College of Nursing
& College of Public Health
University of Nebraska Medical Center
2331 E. Nasturtium St.
Tucson, AZ 85755
j.atwood@worldnet.att.net
phone and FAX: (520) 825-8298

notified: A.S. Hinshaw, PhD, FAAN, Professor and Dean Emerita, University of Michigan School of Nursing, Co-Principal Investigator

From Shalom Schwartz <msshach@mshcc.huji.ac.il>

Sent Wednesday, March 17, 2010 3:41 pm

To Amanda G Rosenkranz <arosenkr@gmu.edu>

Cc

Bcc

Subject Re: Permission to use Schwartz Values Survey Attachments

<u>Article Basic Human</u>	245K	<u>Coding Key Ind</u>	54K	<u>PQ IV</u>	172K
<u>Values.doc</u>		<u>PVQIV.doc</u>		<u>EnglishM&F.doc</u>	
<u>Scoring&ScalingSVS57</u>	50K				
<u>Ind.doc</u>					

Dear Amanda,

You have my permission to use the SVS in your dissertation. I must note, however, that you will have to do a very careful job setting it up for the internet if you are to preserve the critical instructions. By that I refer to the anchoring of responses by reading the whole set of items and choosing the most and least important for each of the two parts before responding to it. Without this, the responses are not nearly as valid.

You might do better with the PVQ that has similar validity and reliability and is easier to use on the internet. See attached materials.

Shalom



One University Ave Kitson 200
Lowell, Massachusetts 01854-5109
tel: 978.934-3250
Fax: 978-452-5711
Web site: <http://www.uml.edu/college/she/WE/>

DEPARTMENT OF WORK ENVIRONMENT

May 12, 2011

Amanda Rosenkranz
George Mason University
20901 Cedarpost Square Unit 301
Ashburn VA 20147-7796

Dear Ms. Rosenkranz:

Thank you for your interest concerning the "Job Content Instrument: Questionnaire and User's Guide." We have received your "JCQ Data Base Form" and your signed permission form.

I hereby send our questionnaire and validation report and research literature as requested. We look forward to supplying you with information that may assist in your research.

You may find more references and information in our book, Robert Karasek and Tores Theorell: Healthy Work, published by Basic Books, 1990.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Robert Karasek' with a stylized flourish at the end.

Robert A. Karasek, Ph.D.
Professor, Work Environment

Enclosures: JCQ User's Guide and Questionnaire
w/Global Economy and new Psychological Strain Scales
w/Karasek, et al, NIOSH, 1982
Karasek, et al (1983/ U.S., QES 1970's) Validation Report
Karasek and Thorell (1990) Healthy Work, Appendix 1)
Karasek, Schwartz, Theorell, Final NIOSH Report (1982)
Kristensen (1995) Stress Med.
Kristensen (1996) J Occ Hlth Psych
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Kawakami (1996), Industrial Health
Karasek (1979), Administrative Science Quarterly

Appendix C
Consent for Participation

Invitation to Participate

Dear Nurse Colleague:

My name is Amanda Rosenkranz. I am a PhD candidate in Nursing at George Mason University, in Fairfax, Virginia. I am completing my dissertation research. I am writing to invite you to complete an online survey. This survey of hospital nurses will examine the relationship between job characteristics, values and intent to leave a job or nursing in general. The knowledge gained from the survey results may lead to improvements in the work environment. It is also the hope that the results will lead to effective retention strategies.

You are receiving this invitation because you are working as a registered nurse in a hospital setting in the Commonwealth of Virginia. If you choose to participate in the research, please type in the link listed below and follow the instructions:

https://www.surveymonkey.com/s/GMU_Values_Job_Intent_Survey

Completing the survey indicates that you have read the informed consent document on the first page and agree to participate. There are no forms to return and the survey will take approximately 20 minutes to complete. Once you have completed the survey, you will have the option of entering your email address for a chance to win a \$50 Amazon.com gift card. Thank you for your participation.

Sincerely,

Amanda Rosenkranz, MSN, RN, PhD(candidate)
George Mason University
School of Nursing
4400 Fairfax Drive
Fairfax, Virginia 22030
arosenkr@gmu.edu

The Influence of Values and Psychosocial Job Characteristics on Intent to Leave Among Hospital Nurses Pilot Study

Research Procedures

This research is being conducted to further knowledge of values, job characteristics and intent to leave within the nursing profession. If you agree to participate, you will be asked to fill out a confidential survey lasting up to 15 minutes.

Risks

There are no foreseeable risks for participating in this research. While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission.

Benefits

There are no direct benefits to you other than furthering knowledge about values, job characteristics and intent to leave within the nursing profession.

Confidentiality

The data in this study will be confidential. Results in SurveyMonkey will only be viewed by Amanda Rosenkranz and Dr. Teresa Panniers. Your name will not be included on the surveys and other collected data.

Participation

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty. There are no costs to you or any other party.

Contact

This research is being conducted by Amanda Rosenkranz, RN, MSN, CPEN, CPN for completion of doctoral dissertation research, with faculty advisement from Teresa Panniers, PhD, RN, CRNP. The George Mason University Human Subjects Review Board has waived the requirement for signing the consent form. However, if you would like to sign a consent form prior to beginning the research, Dr. Teresa Panniers may be contacted at (703)993-1935 and Amanda Rosenkranz may be reached at (703)726-8027. You may also contact the George Mason University Office of Sponsored Programs at (703) 993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

Consent

By completing the online survey, I agree that I have read this form and will participate in this research. No identifying information will be connected to the survey completed on SurveyMonkey. I understand that Job Content Questionnaire (JCQ) data, marital status, age, gender, weekly hours worked, annual income as a nurse, rural location, firm size and education level will be provided to Dr. Robert Karasek per user agreement of the JCQ. This SurveyMonkey account is protected by a password known only by Amanda Rosenkranz.

Invitation to Participate

Dear Nurse Colleague:

My name is Amanda Rosenkranz. I am a PhD candidate in Nursing at George Mason University, in Fairfax, Virginia. I am completing my dissertation research. I am writing to invite you to complete an online survey. This survey of hospital nurses will examine the relationship between job characteristics, values and intent to leave a job or nursing in general. The knowledge gained from the survey results may lead to improvements in the work environment. It is also the hope that the results will lead to effective retention strategies.

You are receiving this invitation because you are working as a registered nurse in a hospital setting. If you choose to participate in the research, please type in the link listed below and follow the instructions:

https://www.surveymonkey.com/s/GMU_Values_Job_Intent_Survey

Completing the survey indicates that you have read the informed consent document on the first page and agree to participate. There are no forms to return and the survey will take approximately 15 minutes to complete. Thank you for your participation.

Sincerely,

Amanda Rosenkranz, MSN, RN, PhD(candidate)
George Mason University
School of Nursing
4400 Fairfax Drive
Fairfax, Virginia 22030
arosenkr@gmu.edu

The Influence of Values and Psychosocial Job Characteristics on Intent to Leave Among Hospital Nurses Study

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This research is being conducted to further knowledge of values, job characteristics and intent to leave within the nursing profession. If you agree to participate, you will be asked to fill out a confidential survey lasting up to 15 minutes.

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The data in this study will be confidential. Results in SurveyMonkey will only be viewed by Amanda Rosenkranz and Dr. Teresa Panniers. Your name will not be included on the surveys and other collected data.

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Consent

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The Influence of Values and Psychosocial Job Characteristics on Intent to Leave Among Hospital Nurses Study

Research Procedures

This research is being conducted to further knowledge of values, job characteristics and intent to leave within the nursing profession. If you agree to participate, you will be asked to fill out a confidential survey lasting up to 15 minutes.

Risks

There are no foreseeable risks for participating in this research. While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission.

Benefits

There are no direct benefits to you other than furthering knowledge about values, job characteristics and intent to leave within the nursing profession.

Confidentiality

The data in this study will be confidential. Results in SurveyMonkey will only be viewed by Amanda Rosenkranz and Dr. Kathy Richards. Your name will not be included on the surveys and other collected data.

Participation

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty. There are no costs to you or any other party.

Contact

This research is being conducted by Amanda Rosenkranz, RN, MSN, CPEN, CPN for completion of doctoral dissertation research, with faculty advisement from Kathy Richards PhD, RN, FAAN. The George Mason University Human Subjects Review Board has waived the requirement for signing the consent form. However, if you would like to sign a consent form prior to beginning the research, Dr. Kathy Richards may be contacted at (703)993-1962 and Amanda Rosenkranz may be reached at (703)726-8027. You may also contact the George Mason University Office of Sponsored Programs at (703) 993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

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Curriculum Vitae

Amanda Rosenkranz received her Bachelor of Science in Nursing at the University of Missouri-Columbia in 1999. She went on to receive her Master of Science in Nursing at University of Missouri-Columbia in 2002, concentrating in the Clinical Nurse Specialist track. She is certified in pediatric emergency nursing and pediatric nursing. After finishing her Doctor of Philosophy in Nursing at George Mason University in 2012, she will continue as an RN IV in the Pediatric Emergency Department at Inova Loudoun Hospital in Leesburg, Virginia.